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Oil, Paint and Drug Reporter

The Chemical Market Authority Since 1871

ABC

Volume 143 No. 20 — Schnell Publishing Company, Inc., Publishers — May 17, 1943

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OPD—5-17-1943

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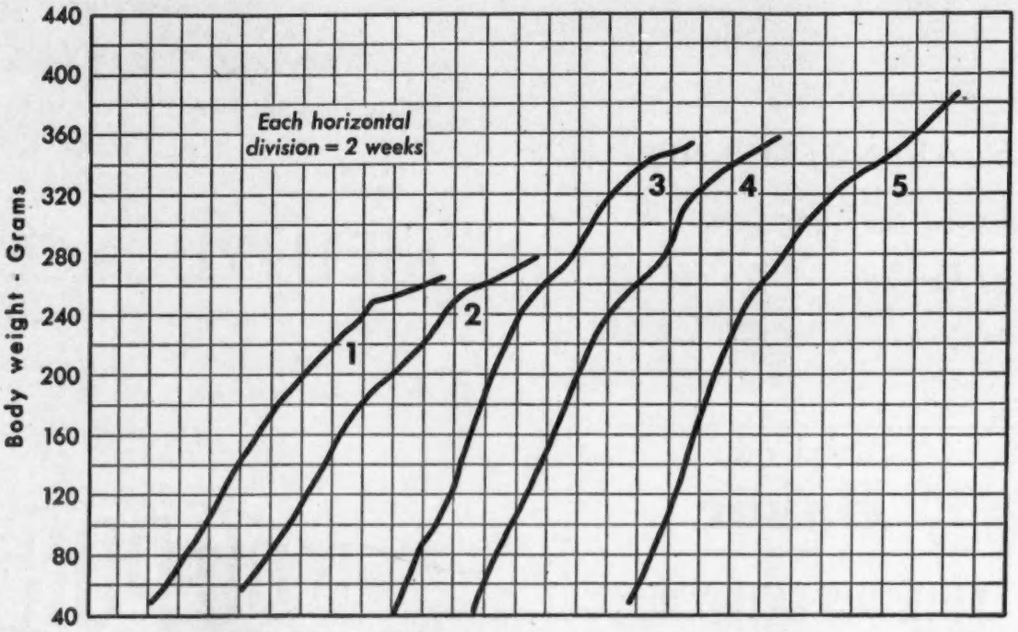

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(Growth curves of male rats for 20-week periods)

GROUP 1. B-Complex free basal ration plus 200 mg. Dry Brewers' Yeast per rat per day.

GROUP 2. B-Complex free basal ration plus 66 mg. Type 3 Extract per rat per day (one-third of amount of Brewers' Yeast fed to Group 1).

GROUP 3. B-Complex free basal ration plus 400 mg. Dry Brewers' Yeast per rat per day.

GROUP 4. B-Complex free basal ration plus 133 mg. Type 3 Extract per rat per day (one-third of amount of Brewers' Yeast fed to Group 3).

GROUP 5. Normal Ration.

In each case, the response of a given amount of Dry Brewers' Yeast was paralleled by that of only one-third as much Type 3 Extract.

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Oil, Paint and Drug Reporter

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THE CHEMISTS' CLUB

Wage Adjustments Authorized by Byrnes

OPD Washington Bureau

Groundwork for establishment of a new national wage policy to give recognition to "gross inequalities" in present wage rates and to make adjustments "to aid in the effective prosecution of the war" was provided May 12 by Stabilization Director James F. Byrnes in a policy directive to the War Labor Board supplementing and relaxing the "hold-the-line" order of the President.

The new policy will permit adjustments in wage rates as long as they do not affect price ceilings or production cost levels. It was interpreted as restoring to the board at least a major part of the judicial discretion enjoyed by it prior to the "hold-the-line" order, and had the immediate effect of forestalling an open revolt of the labor members of the board against the rigidity of the President's order.

While the supplemental directive did not go so far as either the labor

—Continued on page 74

—O-P-D—

Wide-Mouth Glass Container Prices Ceiled

OPD Washington Bureau

The Office of Price Administration has rolled back the prices of wide mouth glass containers sold to commercial packers. The new regulation No. 332 becomes effective May 27. Specific dollars-and-cents ceilings were established in this action for all types of wide mouth glass containers at levels that prevailed July 1, 1941, and replaced current ceilings which reflected October, 1941, levels.

The wide mouth glass containers covered in the action are those used by commercial packers in the packing of foods and other products. They rarely are sold as empty jars to the general consumer and have become increasingly important in the war food program as a substitute for tin and other metal containers. Previously they had been subject to the General Maximum Price Regulation and Maximum Price Regulation No. 188 (Manufacturers' Maximum Prices for Specified Building Materials and

. —*Continued on page 51*

—O-P-D—

War Goods Price Adjustment Policy Set

OPD Washington Bureau

Several changes designed to improve and clarify procedure for handling price adjustment applications on war goods were announced May 12 by the Office of Price Administration. These changes, contained in revised supplementary order No. 9 and amendment 2 to procedural regulation No. 6, effective May 17, 1943, are:—

1. Commodities and services covered previously by the general term "essential to the war effort" now are specifically defined as those sold to the Army, Navy, Maritime Commission or the War Shipping Administration, for Lend-Lease purposes, and to an allied government, as well as commodities and services used in the production and manufacture of these goods.

2. Contracts for war goods with the exception of scrap and waste material and meats may be entered into, and bids or offers made, at prices higher than the established maximums during the five days prior to the filing of an application for adjustment as well as until final disposition of the application, but payments are prohibited at the higher level until action has been taken on the adjustment application.

Formerly a seller wanting to contract with the government at a price higher than the OPA maximum was required to apply for a higher ceiling before bidding or selling at the higher price. Now he may bid or sell at a price above

—Continued on page 72

BEW Office In N.Y. Moved

The New York Office of the Board of Economic Warfare is now located in 61 Broadway. The office was formerly located in 500 Fifth avenue. The new telephone number is Whitehall 3-4848. The New York unit of the Office of Imports is also located in the same building.

Argentina Casein Importation Allowed

OPD Washington Bureau

Permits for the importation of a small quantity of casein from Argentina have been granted by the Stockpiling and Resources Division of the War Production Board, it was stated by officials of the division May 11. However, they cautioned against the move being interpreted as a complete let-down of the bars on such imports, stating that permits for future imports will depend upon the shipping circumstances at the time.

The amount involved in the permits granted totals but 800 tons, an insignificant quantity in comparison with the needs of the industry for the product. Argentina is known to have large quantities of casein that could be exported, but up to now shipping space has not been allotted for the product. Officials said that the imports upon arrival in the United States will be allocated by the Chemicals Branch of the WPB along with the domestic production, in accordance with the provisions of order M-307.

Officials refused to speculate whether the action portends a change in our diplomatic approach toward

—Continued on page 54

—O-P-D—

Tariff Pacts Extension Approved by House

OPD Washington Bureau

The administration's bill, amended to extend the life of the reciprocal trade agreements act for a period of two years beginning June 12, was passed by the house May 13 and sent to the senate for concurrent approval. As originally proposed the law was to be extended for three years, but the period was reduced by amendment from the floor.

A number of attempts to curb the powers of the President under the law, by prohibiting reductions in tariffs that would enable foreign commodities to enter the United States at levels below domestic production costs, and to require congressional approval of the agreements before they became effective were defeatd during the four days the measure was under consideration.

Packaged Drug Price Ceiling Exempts Crude Botanicals

OPD Washington Bureau

The packaged drug industry, including manufacturers, wholesalers, and retailers of proprietary medicines and pharmaceuticals, May 13 was placed under a separate price regulation patterned to meet pricing problems resulting from wartime changes and to continue in effect the March 1942 level of prices.

The regulation provides methods by which the manufacturer can readily determine maximum prices for new and changed packaged drugs with a minimum of inconvenience and delay and without the necessity of securing maximum price authorization through the issuance of individual orders for each product by the Office of Price Administration.

The action is part of OPA's over-all program of simplification and "tailoring" regulations to fit the problems of various industries. Easily determined prices and pricing methods and elimination of unnecessary burdens of all kinds are the goals of this OPA program. This action carries the program forward by furnishing the drug industry with a pricing method relatively free from uncertainties and delays. Elimination of these, OPA pointed out, will contribute to the effectiveness of price control.

All packaged drugs, such as cold tablets, vitamin products, headache remedies, cough medicines and syrups, nose, ear and eye drops, laxatives and others—whether sold in hospital and institutional sizes or retail consumer sizes are covered by the new measure. "New" or "changed" packaged drugs, entirely new products, or old products which have been changed either in formula, form, or size to meet the exigencies of war, can be priced by the new measure's "automatic pricing" formulas.

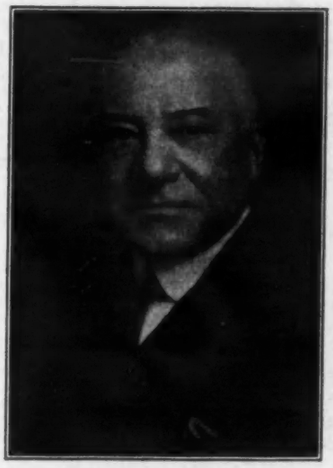
While the methods by which the manufacturer determines maximum prices for new and changed products are necessarily detailed because of the complex nature of the industry, Price

—Continued on page 55

—O-P-D—

Wasserscheid Honored By Round Table Knights

A luncheon was tendered A. A. Wasserscheid, of the Mallinckrodt Chemical Works, in the Drug and Chemical Club, this city, May 14. The luncheon, sponsored by the "Knights of the Round Table," marked Mr. Wasserscheid's fifty years with the Mallinckrodt organization. G. H. Niemeyer, as toastmaster, presented Mr. Wasserscheid with a gold tray, on which was inscribed the names of the "Knights of the Round Table." Signatures on the tray were:—



A. A. Wasserscheid

George Anderson, W. D. Barry, Joseph C. Hanson, jr.; A. J. Higgins, J. L. Hopkins, J. A. Huisking, E. Kuttroff, J. H. Leonhardt, F. J. McDonough, Irving McKesson, Donald McKesson, G. H. Niemeyer, J. J. Powers, Philip A. Rising, J. L. Smith, A. A. Teeter, P. S. Tilden, V. E. Williams.

'Sal Hepatica' Hit By F.T.C. Order

The Federal Trade Commission has ordered the Bristol-Myers Company, Hillside, N. J., to cease and desist from certain misrepresentations concerning the therapeutic and curative properties of the laxative designated "Sal Hepatica". The representations prohibited were made by the respondent corporation in advertisements in newspapers and magazines and in radio continuities.

The order directs the respondent to cease and desist from disseminating advertisements which represent, directly or by implication, that Sal Hepatica will correct systemic, as distinguished from gastric, acidity, or restore the alkaline reserve of the body; that it constitutes a cure or an effective treatment for colds or will exercise any direct or specific curative effect upon the etiological factors of a cold other than such benefit as may result from the relief of constipation when such condition accompanies the cold; that it is a cure or an effective treatment for rheumatism, arthritis or neuritis or unnatural fatigue or nervousness; that it furnishes any relief for upset stomach in excess of its value in reducing gastric acidity; that it is an effective

—Continued on page 51

—O-P-D—

Inventories 'Swaps' Interpreted by WPB

OPD Washington Bureau

Questions relating to such things as imported goods, "swaps" of inventories between merchants, calculation of allowable receipts, and other problems arising from operation of order L-219 are dealt with in the first official interpretation of the order issued May 10 by the War Production Board.

The interpretation also spells out the method for calculation of allowable receipts for the second quarter of 1943, gives a detailed definition of consumers' goods and mercantile inventory as covered by the order, and also specifies what is meant by imported goods and antiques.

Cosmetic Pricing Regulation

OPD Washington Bureau

Following four general meetings in Washington and New York with cosmetic manufacturers, wholesalers, and retailers and other conferences with the industry, the Office of Price Administration issued May 12 a maximum price regulation for packaged cosmetics. It affects about 200 types of cosmetics with several thousand tradenames. The new regulation, maximum price regulation No. 393, covers all packaged cosmetics except certain private formula products whose manufacturers' prices are established under maximum price regulation No. 282. It becomes effective May 26.

Establishing prices at all levels from the manufacturer to the consumer, the packaged cosmetic regulation maintains the existing general price levels as they have been determined, in many cases by special OPA orders, under the General Maximum Price Regulation. Specific prices established under the General Maximum Price Regulation are made maximums under the new regulation, and methods for determining prices of new and changed products are designed to produce ceilings in line with those established under the former regulation. In other words, the object of both the new regulation and the General Maximum Price Regulation is the same, but new and more flexible means to achieve it are provided by the new action.

—Continued on page 57

OPD Price Index

The Oil, Paint and Drug Reporter's relative record of prices for chemicals and related materials is currently as follows:—

May 14, 1943	May 7, 1943	May 15, 1942
136.0	136.2	146.9

The base of the OPD Price Index is the average of prices in 1926 and 1936, those years representing extremes of price undulations in the interwar period.

Prices were advanced on dark and medium gum rosins, gum turpentine, Pennsylvania gasoline and furnace oil, anise oil, domestic mustard seed, and a few secondary imported spices.

Prices were reduced on belladonna leaves, burdock, damiana, dandelion, elm bark, gentian, henbane, papain, sabadilla, stramonium leaves, some chillies, zanzibar cloves, a few minor spices, crystal urea, nitrate of ammonia, domestic lemongrass oil, gum arabic sorts, Syrian caraway, pale gum rosins, and California fuel oil.

Bids Wanted

Alumina Hydrate:—20,000 pounds, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Barytes: — 1,000,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Calcium Carbonate:—50,000 pounds, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Calcium Chloride:—17,500 pounds, Chief Clerk, Justice, Bureau of Prisons, Medical Center for Federal Prisoners, Springfield, Mo.; invitation 17-758, opening May 19.

Carbon Black:—4,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Iron Oxide, Precipitated, Black:—45,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Lemon Oil:—200,000 pounds, Chief, Special Commodities Branch, Food Distribution Administration, Department of Agriculture, Washington; FSC 1447, opening May 24.

Paris White:—80,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Plate Paste Drier:—200,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Red Toner, Permanent:—10,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

Salt:—60,000 pounds, Chief, Special Commodities Branch, Food Distribution Administration, Department of Agriculture, Washington; FSC 1440, opening May 19.

Scouring Powder:—16,320 pounds, Purchasing Agent, Post Office Department, Washington; invitation 125, opening May 21.

Soap, Chip:—3,420 pounds, Procurement Division, Veterans Administration, Washington; invitation 132-S, opening May 17.

Soap, Laundry:—47,080 pounds, Procurement Division, Veterans Administration, Washington; invitation 132-S, opening May 17.

Soap, Laundry:—259,800 pounds, Purchasing Agent, Post Office Department, Washington; invitation 33, opening May 24.

Soap, Powder:—23,520 pounds, Purchasing Agent, Post Office Department, Washington; invitation 125, opening May 19.

Soap, Powder:—50,000 pounds, General Purchasing Officer, The Panama Canal, Washington; schedule 6945, opening May 25.

Soap, Toilet:—82,550 pounds, Procurement Division, Veterans Administration, Washington; invitation 132-S, opening May 17.

Soap, Toilet:—67,400 pounds, Purchasing Agent, Post Office Department, Washington; invitation 125, opening May 19.

Soap, Toilet:—2,500 pounds, General Purchasing Officer, The Panama Canal, Washington; schedule 6945, opening May 25.

Spices:—Supplies of, Special Commodities Branch, Food Distribution Administration, Department of Agriculture, Washington; FSC 1432, opening May 20.

Titanium Dioxide:—15,000 pounds, Director, Bureau of Engraving & Printing, Washington; schedule 4, opening June 16.

—O-P-D—

APC Issues Copies Of Seized Patents

OPD Washington Bureau

Printed copies of the specifications and drawings of foreign patent applications which have been vested by the Alien Property Custodian are now being published on a schedule that will see all Patent Office classes available for public distribution by July 1, 1943, the Office of Alien Property Custodian recently announced. The applications in Patent Office Class 260, relating to organic chemistry, were published on April 20, 1943, classes 1 to 54 on April 27, and classes 64 to 102 on May 4.

—O-P-D—

Zinc Oxide Prices Rise in Britain

LONDON, May 14, 1943.

Prices on zinc oxide higher at £3 2d 6s per ton; red seal, £31 10s; green seal, £33; white seal, £34.

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Caffeine Price Exemption Granted

OPD Washington Bureau

Exceptions granted to six high-cost producers of caffeine which permitted them to sell this essential chemical at prices substantially higher than ceilings set over caffeine production in general were limited May 16 by the Office of Price Administration to the caffeine produced solely from high cost or low yielding materials.

Maximum Price Regulation No. 353 provided a special price of $9 per pound for sales of anhydrous caffeine produced by the following:—Casco Chemical Works, New York; Fallex Products, New York; Verona Chemical Company, Newark, N. J.; Robert & Co., New York; S. B. Penick & Co., New York, and American Chlorophyll, Inc., Alexandria, Va. Other producers, using higher yielding materials in their production, were held to a base price of $3 per pound.

The exception was granted to assure continued production of caffeine in view of the extreme shortage. The exception was drafted, it was possible for the producers subject to the exception to compete for more desirable materials used by the other producers. The action modified the exception so that it applies only to caffeine produced from the high cost or low yielding materials, coffee soot, coffee chaff, and damaged coffee. It also permits these named firms to sell grades of caffeine, other than anhydrous, on the basis of $9 per pound for anhydrous caffeine. The producers are permitted to use up their existing stocks of other raw materials.

The action, amendment No. 1 to regulation No. 353, becomes effective May 21. Coffee soot is obtained by producers from coffee roasters and is the residue which collects on the roasters and flues during the roasting process. The other caffeine raw materials are coffee (used in decaffeination), tea waste, and cocoa waste.

Imported Rotenone Root Price Set

OPD Washington Bureau

Establishment of a new pricing method for imported South American rotenone root to safeguard United States rotenone processors and agricultural insecticide manufacturers from a threatened increase in costs of the root was announced May 16 by the Office of Price Administration. The Commodity Credit Corporation is the sole importer of the product.

By Amendment No. 2 to MPR298, effective May 21, the OPA fixed maximum prices for 5 percent crude rotenone root at 22 cents per pound, which is nine-tenths of a cent above the prices recently resulting from the formula set forth in appendix "A" of the regulation. The American processor's profit margin is correspondingly reduced by the Amendment, as he is required to absorb the increased cost of the root. Establishment of a specific price for the root eliminates the processor's hazard of fluctuations in root prices, OPA pointed out.

—O-P-D—

Lacquer Sales Up

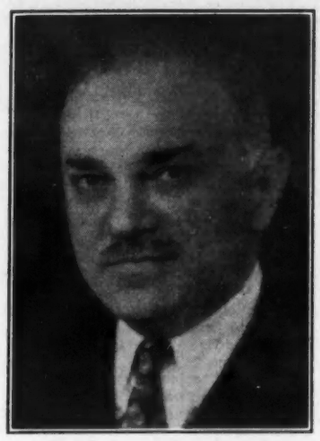
Sales of clear lacquers, pigmented lacquer bases and dopes, and thinners by 158 manufacturers, as reported to the Bureau of Census for the first quarter of 1943, and a comparison with those for the corresponding period of 1942, are set forth below:—

	1943.	1942.
Clear lacquers—		
Gallons	3,517,085	3,751,652
Value	$5,289,564	$5,540,171
Pigmented lacquers—		
Gallons	2,875,454	3,346,017
Value	$6,126,822	$7,752,049
Lacquer bases and dopes—		
Gallons	784,067	940,571
Value	$1,047,000	$1,183,342
Lacquer thinners—		
Gallons	5,357,817	5,980,459
Value	$4,752,524	$5,065,743
Totals—		
Gallons	12,534,423	14,018,699
Value	$17,215,910	$19,541,305

N.Y. Paint Club Elects De Vos President

Augustus R. De Vos, of Breinig Brothers, Inc., was chosen president and three new members were added to the executive committee of the New York Paint, Varnish and Lacquer Association at the annual meeting and election for officers, held in the Hotel Biltmore, May 13.

Louis Gillespie, Gillespie-Rogers-Pyatt Company, the retiring president.



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Augustus R. De Vos

was made vice-president; Page N. Hamilton, Harshaw Chemical Company, was re-elected secretary, and Hendrick E. Hendrickson, S. Winterbourne & Co., treasurer.

The three new members of the executive committee are A. E. Horn, A. C. Horn Company; W. H. Matthews, Devoe & Raynolds, and A. J. Wittenberg, Stroock & Wittenberg.

In the absence of Mr. Gillespie, who is recovering from a severe attack of virus pneumonia in Washington, D. C., Leo Roon, the retiring vice-president, presided at the gathering which, as usual was preceded by a dinner.

—O-P-D—

Nitrocellulose Order Revoked by WPB

OPD Washington Bureau

Because the supply and demand situation on soluble nitrocellulose has eased, the War Production Board, May 14, revoked general preference order M-196, governing this material.

The supply of raw materials for the manufacture of prime soluble nitrocellulose is relatively good, and manufacturing capacity is adequate, the protective coatings section of the Chemicals Division, WPB, stated. Augmenting the supply of prime material are considerable amounts of scrap which can be used in the protective coatings field.

In view of the comparative adequacy of supplies of nitrocellulose, the Protective Coatings Section felt that continuance of the allocation control exercised by this order was not justified when compared with the saving of clerical work to industry.

Soluble nitrocellulose is used for lacquers, coated textiles, photographic film, and plastics for both military and civilian items.

—O-P-D—

Waste Fats Recovery Sources Required

The nation's 40,000 chemists are being asked to help find new sources of waste fats and vegetable oils for salvage purposes it was announced this week by Marcus W. Hinson, senior industrial specialist of the Chicago War Production Board's salvage division. Mr. Hinson, who was loaned to WPB by the American Chemical Society to set up a national program for industrial fats and oils recovery, says that industrial needs for 1943 alone call for at least 350,000,000 pounds of fats and oil.

Mr. Hinson has set a national goal of 500,000,000 pounds, but declares this will be reached only if the nation's chemists are able to discover new methods and sources of fats and oils salvage. Mr. Hinson asks that new ideas be transmitted to him at Room 909, National War Agencies building, 226 West Jackson boulevard, Chicago, Ill.

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Copper Sulphate Ceiling Revised

OPD Washington Bureau

Copper sulphate distributors may charge retail ceiling prices in their retail sales of quantities less than 300 pounds of the commodity when it is sold for use as an agricultural insecticide or fungicide, the Office of Price Administration has announced.

Under existing provisions of Maximum Price Regulation No. 354, which established ceilings for manufacturers and distributors, a number of distributors, particularly in the western states areas, who also act as retail dealers, were compelled to make retail sales at wholesale prices.

This new action permits distributors who make retail sales to use the maximum prices provided for retail dealers in Maximum Price Regulation No. 144. However, for quantities of 300 pounds or more, the distributor must use the wholesale ceilings established by regulation No. 354.

The action which conforms the regulation to the practice of the industry, also changed the basis of pricing monohydrated copper sulphate produced in western territory, as defined in the regulation, from an f.o.b. works basis to a delivered basis.

The changes include a reduction of

—Continued on page 54

—O-P-D—

Chromium Delivery Restrictions Eased

OPD Washington Bureau

Small deliveries of chromium may be made without War Production Board authorization under an action taken by WPB to simplify administration of chromium order M-18-a.

Supplementary order M-18-a-1 permits deliveries of chromium by processors and dealers in quantities of 3,000 pounds or less to a single customer in any one month, provided the material is to be used for metallurgical purposes. The new order also relieves purchasers of quantities within this limit of the necessity of filing report forms usually required by Order M-18-a. It does not, however, relieve chromium consumers from filing Form WPB-532 with the Bureau of Mines.

—O-P-D—

Zein Placed Under Allocation by WPB

OPD Washington Bureau

Zein, an alcohol soluble protein derived from corn which may be used as a substitute for shellac when combined from rosin, was placed under allocation control by the War Production Board May 15 with issuance of order M-320.

The product came into commercial use about a year ago when supplies of shellac became short, and is being used in the production of aniline ink for food packages, in the paper industry for grease proof paper and food wrappers, in the manufacture of phonograph records and imitation leather.

Under the order, effective June 1, no deliveries of Zein may be made without specific authorization of the WPB. Suppliers must file applications under PD-602 by the 20th of the month preceding deliveries. Buyers must certify the end use of the product to suppliers. Deliveries of 100 pounds or less in any one month are exempt.

—O-P-D—

Ascorbic Acid Allocation Simplified

OPD Washington Bureau

Under an amendment to general preference order M-269, controlling deliveries of ascorbic acid (vitamin C), the War Production Board May 10 simplified the method of allocating this vitamin. Users of ascorbic acid in medicines and food products are no longer required to submit form PD-600 to the War Production Board each month for authorization to accept delivery of the material.

The purchaser now merely places his customary purchase order with his supplier and the supplier makes application to the War Production Board for approval of his delivery schedule, certifying the end use planned by his customer. The order affects all chemical compounds of ascorbic acid, but does not cover standard dosage forms or ascorbic acid incorporated into feeds, foods and beverages, or ascorbic acid of natural origin.

Washington Talks It Over

Observations • Prognostications • Developments

By OPD Observer

The automatic pricing regulations for packaged drugs and cosmetics have finally been issued by OPA after long months of study. The many hours of midnight oil consumed in the deliberations appear to have been worth while.

The immediate reaction, at least among those concerned with the problems here, appears to be favorable. The feeling is that OPA has met the major objections to the original regulations as far as could have been expected, and has done a good job. Particularly are they pleased over the elimination of the fair trade laws references as one standard in pricing the products because the way the provision would have worked out would have been to make the fair trade minimums the maximums.

The only complaint appears to lie against the requirement that the ceiling prices be stated on the labels, but this is not regarded as too objectionable. All in all, the regulations represent what can be done when the cooperation of industry is sought beforehand instead of *ex post facto*, as it were.

Centralizing Health Plans

The Office of Defense Health and Welfare Services has been abolished by presidential decree and replaced by the Office of Community War Service in the interest of simplifying and strengthening channels of Federal cooperation in meeting essential wartime health and welfare needs.

The change is more than just in name only. In the new setup the organization is physically a part of the Social Security Agency directly under the supervision of Administrator McNutt. It will receive its funds through the regular appropriating channels rather than through allotment of emergency funds by the President.

The function of the office will be to serve as the center for the coordination of health and welfare services of the government, as well as private agencies, and to make available to States and localities, upon request, the services of specialists in health and welfare activities to assist in the planning and execution of local programs.

Derris Promoted

A noted United States plant physiologist has gone to Central America to work with agricultural authorities there in a program for stimulating production of insecticides to help meet the increasing needs of the Americas for this product. He is Dr. Rufus H. Moore, of the United States agricultural experiment station in Puerto Rico.

Dr. Moore has been assigned to Central America by the Board of Economic Warfare, which is working to develop additional sources of insecticides and believes Central America to be well adapted for growing of derris root. From the Puerto Rico experiment station, the United States is prepared to furnish derris root cuttings to the other Americas to encourage development of this production.

More Drinking Alcohol

It may be that a decision will be made sometime this month on whether whisky distillers are to be given a furlough from the production of alcohol for war use and go back to the manufacture of liquor. WPB is under terrific pressure to permit this, not only from outside the government but within the government as well.

The basis for the pressure is a feeling that sufficient alcohol has been stockpiled to meet all requirements as now foreseen and the situation is reaching a point where the problem of sufficient storage space is looming. A plan now being talked up is to permit the distiller to retain a certain percentage of his alcohol production—probably 10 percent—for making straight whiskies or neutral spirits for beverage use and earmarking the rest for the government.

Is It Largely a Peeve

Dissatisfaction of Congress with the way the civilian needs have been considered in the past by the War Production Board can be chalked up as the reason for passage by the senate this week of the Maloney bill to set up an Office of Civilian Supply independent of WPB. The vote was a protest vote pure and simple, and few in Congress expect that the Maloney bill will ever become law.

Much basis for the belief that the bill has got about as far as it will get can be found in the developments of the past. When the protests over the handling of civilian requirements became too hot the set up was reorganized in WPB to give it a louder voice in the cutting of the materials supply, and Arthur D. Whiteside was placed at its head. Anyone who knows Mr. Whiteside does not believe that he would ever have taken the job had he not been advised beforehand that the bill would never get by the White House.

PX Competition Ended

The War Department and the retailers have patched up their differences over the operations of the army post exchange stores—the army backing down and ordering the operators of these stores hereafter to limit their special order business to military necessity items of military personnel not carried in inventory.

The action was taken only recently after the retailers threatened to go to Congress for an investigation of what they considered was an encroachment of the PX's upon their territory. They had expected that when an army camp would open up in the vicinity the men would flock to their stores for their needs, but they found instead that they were giving their business to the army exchanges.

Some idea of the magnitude of this threat to the business of the local stores is gained from these figures of the department:—Last October PX sales amounted to $34,000,000 or 0.61 percent of total retail sales of the country; the special order business amounted to about 2 percent of the total PX sales.

Ginger for Puerto Rico

Scientists of the Puerto Rican agricultural experiment station of the United States Department of Agriculture are suggesting ginger root as a possible crop for the Puerto Rican farmer.

The variety native to Puerto Rico is not the best type for the United States market, and these scientists suggest that intending growers try either the Chinese or the Jamaican variety. Planting stock of the better types for commercial production are being propagated for distribution as rapidly as possible.

Lend-Lease a Small Item

There is widespread feeling that Uncle Sam is being too much of a good uncle in the matter of feeding our Allies, and that this is one of the big reasons for shortages in the domestic market and for high prices. These and other charges that we are supplying them with luxury items that they were unable to enjoy even in peacetimes can be heard at most any gathering where the subject tourns to food. But the facts don't bear this out. The next time someone complains that his wife hunted high and low for a nice steak to no avail, or had to part with sixteen precious coupons for a can of peas remember this:—

Less than one-half of one percent of the beef, veal, lamb, and mutton produced in 1942 went out under lend-lease. Our fighting Allies got noly 1½ percent of our pack of the major canned vegetables and fruits, less than 1 percent of our iscreased butter output, about 13 percent of our pork and less than 10 percent of our eggs.

Glycerin Price Ceiling Revised

OPD Washington Bureau

Revision of maximum price regulation for sales of crude and refined glycerin to fit it in a few respects more exactly to conditions in the industry is made today by the Office of Price Administration in issuing Maximum Price Regulation No. 38.

The new regulation, effective May 17, supersedes Revised Price Schedule No. 38—although it incorporates without change the maximum prices established in that schedule. Some of these prices were established in an amendment to RPS 38 effective January 8, 1943, and some were included in the schedule when it was issued October 27, 1941.

The changes define "converter" to mean only persons who buy refined glycerin in quantities of 2,200 pounds or more per month in drums or tankcars, and who repackage it without further processing for resale. OPA excludes most wholesale druggists from coverage by the regulation. Those excluded will establish their maximum prices under the General Maximum Price Regulation, which prices are not in excess of the sellers' highest March, 1942, prices.

The definition of "carload" has been changed to conform with a ruling of the Office of Defense Transportation

—Continued on page 72

—O-P-D—

Domestic Beryl Purchase Price Set

OPD Washington Bureau

Jesse Jones, Secretary of Commerce, has announced that Metals Reserve Company has arranged to purchase domestic beryl and tantalite-columbite ores in both large and small lots at its various purchase depots. This program is designed to stimulate domestic production of these materials and to afford producers a ready market therefor. Under the program Metals Reserve Company will purchase domestic beryl ore on the basis of $120 per dry short ton for 10 percent BeO grade ore, adjusted pro rata, which represents a substantial increase over the price of $83.30 per dry short ton previously paid for 10 percent material. The price scheduled adopted for domestic tantalite ore has also been increased so that the producer will receive approximately 50-cent per pound of contained tantalic oxide (Ta_2O_5) over the former price.

—O-P-D—

Substandard Soybean Oil Prices Ceiled

OPD Washington Bureau

To correct a situation in which substandard crude soybean oil has been selling at the maximum price allowed for standard, the Office of Price Administration has amended the regulation controlling prices of that commodity.

The action, taken through amendment No. 32 to revised price schedule No. 53, was occasioned by the fact that considerable quantities of crude soybean oil reaching the market have been found to be off-quality. Under normal conditions, buyers of such oil would insist upon—and obtain—a reduction in price under that paid for standard oil. In the tight market, however, some sellers have been able to obtain the maximum for standard on sales of substandard.

This amendment, which becomes effective May 19, 1943, provides that, where crude soybean oil does not meet the standard specifications set forth in Rule 102 of the Year Book and Trading Rules 1941-1942 of the National Soy Bean Processors Association, the seller must grant the discounts provided for substandard oil in that rule.

—O-P-D—

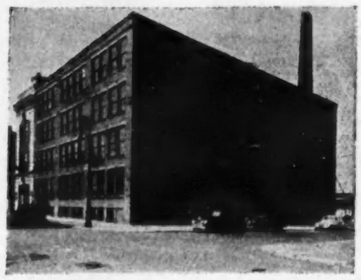
N. Y. Purchasing Agents to Meet May 18

The New York Purchasing Agents' Association will hold a meeting in the Builders' Exchange Club, this city, May 18. Captain A. A. Nichoson, assistant to the vice-president of the Texas Company, this city, will address the meeting on "What Are We Defending?" Dinner will be served at 6:15 p.m., preceding the meeting.

What's new at NYQ

THERE'S always something new at N.Y.Q. New products ...improved methods of manufacture... enlarged control laboratories...better packaging...added research facilities. A new product for the medical, drug or chemical profession—to help alleviate sickness or to help restore health to our armed forces and civilians. Yes—in these busy days there's always something new at N.Y.Q.

Specify N. Y. Q. on your orders



NEW N. Y. Q. BUILDING

N.Y.Q. adds another building. This thoroughly modernized six-story building has aided materially in the speeding up of production, packaging and delivery of N.Y.Q. products. Six stories high—with 60,000 square feet of additional floor space for supplies and services for you. This extra building has released much additional space in the old plant —space much needed to meet the increased demands of production under war conditions. Aided by new automatic packing and filling machinery, automatic conveyors and automatic weighing machines, N.Y.Q. goods flow freely from raw materials to finished products. Now—more than ever—the N.Y.Q. label is your guarantee of quality, purity and service.

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Symbol of Quality

THIS NYQ LABEL CARRIES WITH IT SIXTY-EIGHT YEARS OF EXPERIENCE

Chemical Engineers Discuss War Problems

Wartime problems constituted the theme for discussion at the thirty-fifth semi-annual meeting of the American Institute of Chemical Engineers, held in the Waldorf-Astoria, this city, May 10 and 11. The meeting adopted a resolution calling for the formation of a separate advisory committee "restricted" to "chemists and chemical engineers," to work out problems in connection with personnel military deferments.

Donald B. Keyes, chief of the Chemical Industries Branch of the Office of Production Research and Development, outlined the purpose of his branch and its setup.

The main function of the Chemical Industries Branch, Mr. Keyes said, is to evaluate developments and make recommendations as to the allocation of OPRD funds or the giving of necessary priorities by WPB for specific projects.

Emphasis, he said, is placed on the war demands for the end product and the speed with which a commercial plant can be built and put in operation. The amount of critical material required for plant construction per pound of product is the chief criterion, he added.

Mr. Keyes said that it has been felt justifiable to encourage the building of large pilot plants or even small commercial units to produce chemicals which are not badly needed at the moment but will be needed in case of a long war. Such unit plants, he added, will provide the necessary engineering data and experience to construct quickly any needed number of commercial units.

The Chemical Industries Branch, Mr. Keyes said, has few specific problems for assignment, but will welcome the opportunity to consider any new process to make any chemical badly needed in our War Program, particularly if the new process does not require excessive amounts of critical materials and equipment for plant construction. This branch, he added, would also welcome any knowledge of either new or old products that can be made easily available and which may be used as substitutes for very critical materials.

Examples of new processes already considered by the branch, Mr. Keyes

—*Continued on page 35*

—O-P-D—

Chemical Allocations Supplement Issued

OPD Washington Bureau

The War Production Board announced May 12 the supplemental report on critical chemicals to civilian uses for the month of May. They are as follows:—

Benzene

Granted in full of camphor, monochlorbenzene, dichlorbenzene, anthraquinone, diphenyls, rubber chemicals and granted in part for medicinals (80 percent), solvents (76 percent).

Formaldehyde

Granted in full for manufacture of pentaerythritol, paraformaldehyde, rubber chemicals, and commercial explosives. Granted in full for use in agriculture and in export. Granted to the extent of 90 percent for manufacture of hexamethylenetetramine, phenolic resins,, polyvinyl resins, alkyd resins, and embalming fluid. Granted to the extent of 60 percent for the manufacture of other civilian items, except for the following, which were denied:—liquor and wine closures, cosmetic closures, cosmetic containers, and calender bases. The following exceptions were made to this policy:—urea resin adhesive for civilian furniture—50 percent; adhesives for shipping containers—100 percent; medicinals 100 percent; printing ink—100 percent; matches—100 percent; and coagulant—100 percent.

Phenolic Resins-Protective Coatings

The following end uses were allowed:—1. Transportation-steel barges, crank case sealing compound, interiors of railroad refrigerator cars, interiors of railroad tankcars. 2. Communications and utilities—electrical control apparatus, impregnation varnishes, wound apparatus, battery cables, electrical cable coatings, insulating surface cloth coating, electrical cable coatings and impregnation varnish for coils and wound apparatus, radar equipment (degaussing cable included), radio parts, switchboards, water tanks (interior), telephone and telegraph, finishing varnishes, electrical insulating armatures and lead-in wires, finishing varnishes, insulating

—*Continued on page 36*

Linseed Oil Limits For Paint to Be Set

OPD Washington Bureau

Plans of the War Production Board for conserving supplies of linseed oil by limiting the amount of such oil that may be used in the manufacture of paints are nearing completion and issuance of an order in about two weeks is probable, it was stated by WPB officials May 13.

At the present time it is the intention of officials to state in the order the maximum poundage of linseed oil that may be used in the various types of paints (see page 7) and to extend this control down to the level of painters who do their own mixing on the job.

In effect, it is understood, all supplies of linseed oil will be taken out of commercial channels and strictly controlled as to its use in the mixing of paints. Distributors will not be permitted to sell a mixture of more than 70 percent linseed oil in order that supplies may be conserved at the far end of the use line—the job painter level.

The order is largely the result of the work of the tasks committees over the past several months in endeavoring to determine ways of saving linseed oil, which on the basis of the present rate of consumption would

—*Continued on page 47*

—O-P-D—

FDA Asks Details On Critical Oils

The Food Distribution Administration has announced that, in making applications for authority to accept delivery and to use oiticica, castor, and tung oils, more specific identification of primary product is necessary in order that thorough consideration can be given the application. Instead of covering all types of protective coatings under the general term "protective coating" the exact type of product should be specified; for example:—Paint, varnish, lacquer, enamel, wrinkle finish, phenolic resin, or phthalic alkyd resin. If other synthetic resins constitute the primary product the type of resin should be idenified in terms of the polybasic acid ingredient. Hereafter, the use of the term "protective coating" will be sufficient grounds for denying an application, regardless of the end-use or specification numbers cited, it was stated.

Manufacturers were also requested to discontinue the practice of applying for these critical oils for end-uses which you know will be denied as well as end-uses which can be satisfactorily served with a less critical oil. Only such quantities of oiticica, castor, and tung oils as needed to fill orders which positively cannot be filled without these oils should be sought. If the oil applied for is required in finishes subject to performance or composition specification state the specification number.

Paint Technicians Discuss Drying Oils and War Program

More than one hundred persons attended the mid-year technical symposium of the Federation of Paint and Varnish Production Clubs in Cincinnati May 15 under the chairmanship of John J. Bradley, jr., chief chemist for Bird & Son, East Walpole, Mass. The program was divided into two parts: (1) "Conservation of Drying Oils," conducted by Robert W. Matlack, of George D. Wetherill & Co., Philadelphia, and (2) "The Army-Navy Program," under the leadership of Dr. Joseph J. Mattiello, of the Hilo Varnish Corporation, Brooklyn.

The discussion of drying oils, as Mr. Matlack pointed out, was designed to add a technical complement to the economic consideration which the matter had been given at recent regional meetings under the auspices of the National Paint, Varnish and Lacquer Association. It was opened by Alvin C. Goetz, consultant on paint, varnish and lacquer for the WPB Protective Coatings and Materials Section.

John J. Bradley, jr.
Chairman, F.P.V.P.C. Technical Symposium

Mr. Goetz told of the WPB order limiting the use of drying oils in wrinkle finishes (see page 7), and said that the use of tung oil in maritime varnishes would be stopped June 1. Failure of the oiticica crop in 1941 and 1942 was noted as a factor in the supply of this oil, and Mr. Goetz said that the official expectation was for a deficit of 78,000,000 pounds of linseed oil by September 1, 1944. In any event the supply is and would be inadequate, because of lack of shipping to bring seed from South America.

Limits on Oil Content

Civilian uses of drying oils must be curtailed, Mr. Goetz warned, and industrial conservation is imperatively necessary. Pointing to the receipt of but fifty-five applications under order M125 which applies to about 30.7 percent of paint manufacturers, Mr. Goetz presented the following WPB proposed allowable oil content (tentative) for various classes of paints:—

Class		Maximum pounds of oil per gallon of paint
1	Flats including emulsion paints	1.2
2	Gloss and semigloss paints and interior trim enamels	1.75
3	Interior floor enamels and combination interior-exterior floor enamels, interior household enamel, and combination interior-exterior enamels, machinery enamels	2.30
4	Wall primers and undercoats	2.00
5	Interior varnishes and combination interior-exterior varnishes	2.3
6	Exterior paints	3.75
7	Structural steel finishes, interior-exterior	3.75
8	Exterior enamels and exterior varnishes (those sold exclusively for exterior work)	3.25

Status of Other Materials

The official definition of end uses is basically correct, Mr. Goetz said, but some revision may be necessary. It is expected that close adherence to the end-use criterions will reduce the paper work of allocations and simplify the system. There was nothing new in the pigment situation except that chrome materials and fibrous extenders appeared to be tighter. Naval stores were not troublesome, with the exception of pinetar and hydrogenated rosin.

Restriction is due, he said, on aromatic petroleum solvents and xylol because of increasing military demands. Naphthenates are temporarily ample. Nitrocellulose is in better supply, but ethylcellulose is tight. Tighter allocation is to be looked for on alkyd resins, and the shortage of phenol makes paraphenols very critical. Mr. Goetz advised that requests to WPB for resins be made on a solvent-free basis.

Casein and similar proteins are not promising, but some relief may come through the new corn derivative. Zein faces allocation. Paraffin is easier; but amorphous waxes are not. A limitation order on waxes is in the making. There is nothing promising in the outlook for glycerin.

The shortage of drying oils requires that they be replaced in part with pigments or with thinner or both, perhaps in combination with bodied oil, said J. F. Brooker, sales promotion manager for white pigments in the pigments department of E. I. duPont de Nemours & Co. As to what can be expected under forced formula changes, he said that, with the same film thickness, mixed vehicle would

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—O-P-D—

Rosin's Roles in Varnishmaking

Reprinted, because of the exigencies of wartime resin supplies, from a series of articles by a varnishmaker of long experience, published in OPD in 1924.

Acidless or CP Rosins

(*Continued from May 10 issue*)

Variety of Applications

In making CP rosins it was found possible to combine in true chemical form many metallic salts, such as aluminium, chromium, copper, iron, lead, mercury, manganese, tin, zinc, thereby producing resins suitable for various specific purposes, for instance:—Chromium rosin would be used in the preparation of anti-rust varnishes; copper and mercury rosins, in antifouling varnishes used in marine paints for boat hulls; lead and manganese rosin, for quick-drying varnishes; aluminium and zinc rosins, for hard-surface varnishes; in fact, each metallic salt produces rosins with characteristic features. The chemical combination is perfect and not a mere mixture, nor is it similar to the ordinary metallic resinates.

The CP rosin melts at a slightly higher temperature than does ordinary rosin, but there is not any worthwhile difference. It dissolves readily in hot oil, therefore, does not require fusing, and as it is free from impurities, its varnishes quickly clarify.

The CP rosin may be run to a point where every trace of volatile acid is removed, but for practical purposes it is sufficient to reduce the acid figure only to 16, experience having demonstrated that such a product will not liver or turn white in water, and still will possess the durability of hard gums. It mixes perfectly with kauri and other copals, producing varnishes with increased luster, great fullness and fine levelling qualities.

With the self-drying, hard CP rosin, it is necessary only to melt the gum in the oil; cook at 420° to 480° until the desired body is obtained; then cool to 420° for thinning down with turpentine, or 320° for benzin. Without additional driers being required during the process of cooking, and also without the necessity for high heat, the resulting product is a pale varnish. Furthermore, its simplicity enables maximum batch production in the plant and great economy on account of less time, fuel, and labor involved.

Dr. Scott's process reduces the acid

—*Continued on page 74*

Paint Manufacturing Ruled Essential Industry

OPD Washington Bureau

An amendment to bulletin 17 to include paint manufacturing among those activities in the broad field of chemicals and allied products which are considered essential activities has just been adopted by the War Manpower Commission. Official notification is expected to be made to local selective service boards by May 17.

It is understood that the designation of essentiality is not made applicable to the industry in its entirety, but is limited to those activities directly and indirectly connected with warwork, such as the production of paints for military uses.

The effect of the WMC action is not to grant a blanket exemption from the draft of workers in the paint industry, but rather to guide local draft boards in what the WMC coniders an essential activity. As in all other cases, each registrant for the draft, when called before his local board, must prove his own essentiality in the work he is performing in order to be granted a deferment.

OPD—5-17-1943

REMEMBER HIM? His mother does!

REMEMBER that good-looking fellow who lived in the house next door to you? He was a carefree kid . . . not yet out of his teens . . . who liked to indulge in multicolored socks, the latest swing music, and a lot of other things that high school "flesh is heir to."

You should see him now. He's fought at Guadalcanal and Gafsa, at Chittagong and Casablanca, and wherever else American men have met the enemy. He's changed in a lot of ways. But there's one thing about him that hasn't changed . . . and never will! He's an American! A courageous, confident American. And he's determined to fight like hell for everything he's learned to love and respect . . . his Country, his family, his church, and a fine young girl who writes to him regularly about the future.

• • •

You're in this war, too! You're not out where there's pain, and bloodshed, and death; but you've got a part to play . . . a very important part. Your job is to buy War Savings Bonds and Stamps every payday. Buy as many as you possibly can. It may hurt a little, but it won't hurt as much as a machine-gun slug, or a piece of hot shrapnel.

And remember! Each penny that you invest in a Bond or Stamp will hasten the day when the kid next door can come home to his loved ones again.

The Army-Navy "E" has been awarded to all three plants of Merck & Co., Inc. for Excellence in Wartime Production.

MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

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Current Market Quotations Chemicals and Related Materials

May 14, 1943

Unless otherwise indicated, quotations are first-hands on large lots, f.o.b. New York. Price changes and trends are noted in the market reports, with other informative comment. The locations of these reports are given in the table of contents on page 4.

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A

[a] Acacia (see Gum, Arabic).

Acetaldehyde, 99%, dms., 55 and 110 gls., works..lb. .11 - —
5 and 10 gls., works.....lb. .14 - —

Acetaldol (see Aldol).

Acetamide, CP, fib. dms., 5,000 lbs. a year, works..lb. .36 - —
smaller lots, works.....lb. .55 - .70
tech., fib. dms., 5,000 lbs. a year, works..lb. .28 - —
smaller lots, works.....lb. .30 - .50

Acetanilide, tech., cryst., bbls.lb. .29 - .31
powd., bbls., 2,000-lb. lots..lb. .27 - .29
USP, cryst., bbls., 2,000 lbs..lb. .36 - —
smaller lots.....lb. .37 - —
dms., 25-lb. lots.....lb. .42 - —
kgs., 2,000-lb. lots.....lb. .37 - —
smaller lots.....lb. .38 - —
powd., bbls., 2,000-lb. lots..lb. .34 - —
smaller lots.....lb. .35 - —
dms., 25-lb. lots.....lb. .40 - —
kgs., 2,000-lb. lots.....lb. .35 - —

Acetoacetanilide, bb'ls, fib. dms., 75 lbs..lb. .49 - —
smaller lots.....lb. .67 - —

Acetone, CP,[1] dms., c.l., dlvd. E.[a] lb. .08½- —
l.c.l., dlvd.....lb. .09 - —
tanks, dlvd.....lb. .07 - —
[a] OPA ceiling for East; Western ceiling, ¼c. per lb. higher.

Acetonitrile, dms., c.l., works..lb. .75 - —
l.c.l., works.....lb. .90 - 1.25
5-dm. lots, works.....lb. 1.08 - —
5 gal. lots, works.....lb. 1.25 - —

Methyl (see M).

Acetophenetidin, bbls., kgs., 1,000 lbs..lb. 1.00 - —
dms.....lb. 1.08 - 1.10
Acetophenone, cns., dms.....lb. 1.55 - 1.60
Acetyl chloride, cbys., works..lb. .60 - —

Acid, abietic, dms., c.l.....lb. .08¾- —
Acetic,[2] com'l or redist., 28%, bbls..100 lbs. 3.38 - 3.63
56%, bbls.....100 lbs. 5.58 - 5.83
70%, bbls.....100 lbs. 6.68 - 6.93
80%, bbls.....100 lbs. 7.47 - 7.72
glacial, nat., CP., cbys.100 lbs.13.50 - 13.75
99.5%, bbls.....100 lbs. 9.15 - 9.40
tanks, works.....100 lbs. 8.95 - —
USP, cbys.....100 lbs.11.70 - —
synth., CP., dms., works, 100 lbs.12.50 - 13.50
99.5%, bbls., works.100 lbs. 9.15 - 9.40
dms., works.....100 lbs. 9.25 - 9.75
tanks, works.....100 lbs. 6.25 - 6.35
USP XII, dms., works, 100 lbs.10.50 - 11.00
pure, 30%, bbls....100 lbs. 4.44 - 4.69
36%, bbls.....100 lbs. 4.86 - 5.11
60%, bbls.....100 lbs. 7.60 - 7.85
80%, bbls.....100 lbs. 9.26 - 9.51

Acetic acid price ranges above are for c.l. and l.c.l. quantities. Carboys and cases are 50c. per 100 lbs. higher.

Acetic, anhydride,[a] dms., c.l., frt. alld..lb. .11½- —
l.c.l., dms., frt. alld.....lb. .13 - —
Acetylsalicylic,[1] special, USP, bbls., makers, primary distrib., point of shipm't.... 100 lbs. .45 - —
smaller lots, same basis, lb. .46 - .59

Standard USP, fine cryst., gran. (20-40 mesh), powd. (80 mesh), 200-lb. bbls., same basis..lb. .40 - —
smaller lots, same basis, lb. .40 - .54

Freight equaled, shipment identical quantity, over standard routes, from N. Y. City, Phila., Midland, Mich., Chicago, and St. Louis.

Adipic, fib. dms., works....lb. .31 - —
Anthranilic, resub., bbls....lb. 1.20 - 1.25
tech., bbls.....lb. .95 - —
Arsenous[a] tech. (see Arsenic, White).
USP, powd., dms., kgs....lb. .20 - .22
Ascorbic,[1,5] 1,000-ozs., dms..oz. 1.00 - —
500-oz. lots, dms.....oz. 1.01 - —
100-oz. lots, bots.....oz. 1.01 - —
smaller lots, bots.....oz. 1.04 - 1.07
Battery, cbys., c.l., E. works. 100 lbs. 1.60 - —
10-25, E. works....100 lbs. 1.95 - —
1-9, E. works.....100 lbs. 2.35 - —
Benzoic, tech., bbls., 1,000 lbs. or more..lb. .43 - —
1,000 to 3,900 lbs.....lb. .44 - —
900 lbs. or less.....lb. .47 - —
USP, bbls., 4,000 lbs. up..lb. .54 - —
1,000 to 3,900 lbs.....lb. .55 - —
900 lbs. or less.....lb. .58 - .59
dms., 4,000 lbs. up.....lb. .55 - .56
1,000 to 3,900 lbs.....lb. .56 - .57
900 lbs. or less.....lb. .59 - .60
Boric,[3] tech., 99.5%, cryst., (same as prices for powder).
gran., bgs., c.l., frt. alld. ton.99.00 - —
ton lots, ex whse....ton.111.00 - —
less than ton lots, ex whse..ton.116.00 - —
bbls., c.l., frt. alld..ton.109.00 - —
ton lots, ex whse.....ton.121.00 - —
less than ton lots, ex whse...ton.126.00 - —
bulk, frt. alld.....ton.95.50 - —
powd., bgs., c.l., frt. alld.. ton.104.00 - —
ton lots, ex whse....ton.116.00 - —
less than ton lots, ex whse..ton.121.00 - —
bbls., c.l., frt. alld....ton.114.00 - —
ton lots, ex whse....ton.126.00 - —
less than ton lots, ex whse..ton.131.00 - —
USP $25 per ton higher.
Butyric, 99%, dms., c.l., works. lb. .22 - —
l.c.l., same basis.....lb. .23 - —
tanks, same basis.....lb. .21 - —
Broenner's, bbls.....lb. 1.11 - —

Acid, cacodylic, 5-lb. bots.....lb.22.00 - —
Camphoric, cns.....lb. 6.95 - 7.00
Capric, dms.....lb. .21½ Nom.
Caprylic, dms.....lb. .27 - .27½
Castor oil,[5] split, dms.....lb. .20¾- .21¼
Chlorosulphonic, dms., c.l., wks. lb. .03 - —
l.c.l.....lb. .03½- .04½
tanks, works.....lb. .02½- —
Chromic,[3,5] 99½-99¾%, dms., c.l...lb. .16¼- —
l.c.l.....lb. .16¾- .18¼
Cinnamic, refd., bots.....lb. 3.50 Nom.
Citric, anhyd., gran., dms., c.l., lb. .22½- —
10,000 lbs., 1 ship't....lb. .23 - —
smaller lots.....lb. .23½- .26½
kgs.....lb. .24 - —
cryst., gran., bbls., c.l.....lb. .20 - —
10,000 lbs., 1 ship't....lb. .20½- —
smaller lots.....lb. .23 - .24
kgs.....lb. .21¼- —
Citric acid powd., ½c. higher. Chi., and St. Louis deliveries, ½c. higher than cryst. prices. Chi. and St. Louis, ½c. higher than spot.
Cleve's, bbls.....lb. .65 - —
Coconut oil,[5] dist., dms.....lb. .18½ Nom.
Cottonseed oil,[5] dist., dms...lb. .14 - .14½
tanks.....lb. .13½- —
Cresylic (coaltar),[4] high-boil 50% (210°-215°), low boil 50% (204°-206°), and special blends, dms., c.l., works, frt. equald..gal. .81 - —
l.c.l., same basis....gal. .83 - —
tanks.....gal. .75 - —
Diethylbarbituric (see Barbital).
Formic, dom., 90%, cbys., c.l., works..lb. .10½- —
l.c.l.....lb. .11 - .11½
Fumaric, tech., bbls., ton lots.. lb. .27 - —
smaller lots.....lb. .28 - .31
Gallic, NF VII, bbls.....lb. 1.27 - 1.30
fib. dms.....lb. 1.34 - —
technical, bbls.....lb. 1.05 - 1.13
Gamma, bbls.....lb. .85 - —
Gluconic, bbls., 500 lbs.....lb. .12 - —
kegs, 100 lbs.....lb. .15 - —
dmjn.....lb. .21 - .23
H, bbls.....lb. .45 - —
Hydriodic, 45-47%, cbys.....lb. 2.42 - 2.44
5-lb. bots.....lb. 2.57 - —
57%, bots.....lb. 2.90 - —
Hydrobromic, dil., 10%, cbys.lb. .20 - —
concentrated, 34%, cbys....lb. .33 - —
Hydrochloric (see Muriatic).
Hydrocyanic, cyls., works..lb. .80 - 1.00
Hydrofluoric, 30%, rubber dms., works..lb. .08 - .09
48%, rubber dms., works...lb. .12 - —
52%, rubber dms., works...lb. .12½- —
60%, rubber dms., works...lb. .13½- —
Hydrofluosilicic, 30-35%, bbls..lb. .08 - .09
Hypophosphorous, USP, 30%, dms..lb. .75 - .80
Lactic, edible, 50%, cbys., 20 or more..lb. .12½- —
5 to 19.....lb. .13 - —
1 to 4.....lb. .13½- —
80%, bbls., cbys., 5 or more. lb. .24¼- —
1 to 4.....lb. .24¾- —
plastic grade, bbls., cbys., 20 or more..lb. .14¼- —
5 to 10 cbys.....lb. .14¾- —
1 to 4 cbys.....lb. .15½- —
tech., dark, 22%, bbls., c.l., works..100 lbs. 2.90 - —
l.c.l., works....100 lbs. 3.15 - —
cbys., works.....100 lbs. 4.15 - —
44%, bbls., c.l., works. 100 lbs. 6.30 - —
l.c.l., bbls., works. 100 lbs. 6.55 - —
cbys., works.....100 lbs. 7.35 - —
light, 22%, bbls., c.l., works, 100 lbs. 3.90 - —
l.c.l., works.....100 lbs. 4.15 - —
cbys., works.....100 lbs. 5.15 - —
44%, bbls., c.l., works. 100 lbs. 7.30 - —
l.c.l., works....100 lbs. 7.55 - —
cbys., works.....100 lbs. 8.55 - —
USP XI, 85%, cbys.....lb. .54 - .57
USP VIII, 75%, cbys.....lb. .52 - .55
Lauric, dist., tech., dms....lb. .20 Nom.
Laurent's, bbls.....lb. .45 - —
Linseed oil,[5] light, dms....lb. .21¾- .22¼
Maleic, powd., dms.....lb. .30 - —
anhydride, dms., c.l.....lb. .25 - —
l.c.l.....lb. .26 - —
Malic, powd., kgs.....lb. .47 - —
Mandelic, dms., 1,000 lbs....lb. 2.05 - —
smaller lots.....lb. 2.10 - 2.30
or more..lb. .95 - .96
Mixed, tanks, nitric unit....lb. sulphuric unit.....lb. .0085- .009
Molybdic, kgs., works.....lb. .95 - 1.10
Monochloroacetic, tech., bbls.lb. .17 - —
purified, bbls.....lb. .20 - —
Monosulphonic, bbls.....lb. 1.50 - —
Muriatic, 18°, cbys., c.l., E. works..100 lbs. 1.50 - —
l.c.l., 25 and over, E. works..100 lbs. 1.75 - —
10 to 24, works....100 lbs. 1.85 - —
1 to 9, works....100 lbs. 2.45 - —
tanks, works.....100 lbs. 1.05 - —
20°, cbys., c.l., E. works.... 100 lbs. 1.75 - —
22°, cbys., c.l., E. works.... 100 lbs. 2.25 - —
CP, dealer, cbys.....lb. .06¼- —
6-lb. bots.....lb. .17½- —
consumers, cbys.....lb. .08 - —
6-lb. bots.....lb. .19 - —
Myristic, dist., dms.....lb. .19 - .19½
Naphthenic,[6] 220-230 acidity, dms., c.l., works..lb. .13 - .14
l.c.l., works.....lb. .13 - .15
tanks, works.....lb. .10 - .13
235-245 acidity, dms., c.l., works..lb. .15 - —
l.c.l., works.....lb. .15 - —
tanks, c.l., works.....lb. .13 - —
Nicotinic,[6] dms., 1,000-lb. lots, lb. 5.00 - —
100-lb. fib.....lb. 5.15 - —
50-lb. fib.....lb. 5.25 - —
smaller lots.....lb. 5.30 - 5.50

Acid, nicotinic, amide (see Nicotinamide).
Nitric, 36°, cbys., c.l., E. works, 100 lbs. 5.00 - —
l.c.l., 25, E. works..... 100 lbs. 5.25 - —
10 to 24, works....100 lbs. 5.35 - —
1 to 9, works....100 lbs. 5.95 - —
38°, cbys., c.l., E. works.... 100 lbs. 5.50 - —
Western works....100 lbs. 5.75 - —
40°, cbys., c.l., E. works.... 100 lbs. 6.00 - —
42°, cbys., c.l., E. works.... 100 lbs. 6.50 - —
CP, USP, dealers, cbys....lb. .11½- —
7-lb. bots.....lb. .21½- —
consumers, cbys.....lb. .12 - —
7-lb. lots.....lb. .23 - —
Oleic (see Oil, red).
Oleum (see Sulphuric fuming).
Oxalic,[1] bbls., c.l., works....lb. .11¼- —
10,000 lbs.....lb. .11½- —
smaller lots.....lb. .12½- —
Palm oil,[5] white dist., dms...lb. .13 - .13¼
tanks.....lb. .12½- —
Paraminobenzoic, cns.....lb. 1.40 - —
Paranitrobenzoic, cns.....lb. .72 - —
Phenylacetic, bots.....lb. 1.85 - 3.00
Phosphoric, pure food grade, 50%, c.l., bbls., works, frt. equald..100 lbs. 4.00 - 4.25
cbys., works, frt. equald. 100 lbs. 4.35 - 4.60
l.c.l., 10 or more, works, frt. alld..100 lbs. 5.25 - 6.25
1 to 9 cbys., works, frt. alld...100 lbs. 6.25 - 7.25
tankwagon, dlvd., N. Y., Phila., Met. area..100 lbs. 4.00 - —
75%, c.l., bbls., works, frt. equald..100 lbs. 4.75 - 5.00
cbys., works, frt. equald.. 100 lbs. 5.10 - 5.35
l.c.l., 10 or more, works, frt. alld..100 lbs. 7.00 - 8.50
1 to 9 cbys., works, frt. alld..100 lbs. 8.00 - 9.50
tankcars, works, frt. equald. 100 lbs. 4.00 - 4.25
tankwagons, dlvd., N. Y., Phila., Met. area..100 lbs. 4.75 - —
USP, 100-lb. cbys., c.l.....lb. .10½- —
10 cbys., to c.l.....lb. .11½- —
2 to 9 cbys.....lb. .12 - —
single cbys.....lb. .13 - —
70-lb. cbys.....lb. .10½- —
25 cbys. to c.l.....lb. .11½- —
5 to 24 cbys.....lb. .12 - —
1 to 4 cbys.....lb. .13 - —
10% dilut., cbys., dms....lb. .07 - .07½
Picramic, kgs.....lb. .65 - .70
Picric, bbls.....lb. .35 - —
Propionic, synth., pure, 55-gal. dms., works..lb. .15 - —
tanks, works.....lb. .14 - —
Pyrogallic, tech., bbls.....lb. 1.45 - —
cns.....lb. 1.63 - —
USP, cryst., dms.....lb. 2.10 - 2.15
resub., dms.....lb. 2.60 - 2.65
Pyroligenous, bbls., dlvd. E.gal. .25 - —
Ricinoleic, com'l, split (see Acid, castor oil, split).
tech., dms., works.....lb. .32 - .37
Salicylic,[1] tech., bbls., c.l....lb. .26 - —
100 lbs. to c.l.....lb. .35 - —
smaller lots.....lb. .35 - .42
USP, bbls., c.l.....lb. .28 - —
100 lbs. to c.l.....lb. .35 - —
smaller lots.....lb. .37 - .44
Sebacic, tech., bbls., works..lb. .65 - .69
Soybean oil,[5] dist., dms.....lb. .17¾- .18½
Stearic,[5] double-press., bgs..lb. .15 - .16
single press, bgs.....lb. .14½- .15½
triple press, bgs.....lb. .18 - .19
Succinic, bbls.....lb. .75 - —
Sulphanilic, CP, bots., works..lb. 1.60 - 1.65
tech., dms., works.....lb. .17 - —
Sulphuric,[6] 60°, cbys., c.l., E. works..100 lbs. 1.25 - —
l.c.l., 25 up, works..100 lbs. 1.50 - —
10 to 24, works...100 lbs. 1.60 - —
1 to 9, works...100 lbs. 2.20 - —
tanks, E. works.....ton.13.00 - —
66°, cbys., c.l., E. works.... 100 lbs. 1.50 - —
tanks, E. works.....ton.16.50 - —
98°, tanks, works.....ton.17.50 - —
CP, USP, dealers, cbys....lb. .06¼- —
9-lb. bots.....lb. .15½- —
consumers, cbys.....lb. .08 - —
9-lb. bots.....lb. .17 - —
fuming, 20%, tanks, E. works. ton.19.50 - —
Tannic,[6] tech., bbls., dms...lb. .71 - .73
USP, fluffy, bbls., 1,000 lbs.lb. 1.33 - —
smaller lots.....lb. 1.35 - 1.38
powd., bbls., 1,000 lbs....lb. 1.13 - —
smaller lots.....lb. 1.15 - —
Tartaric, USP, cryst., gran., powd., bbls., 10,000 lbs., 1 ship't..lb. .70½- —
smaller lots.....lb. .71 - —
kgs.....lb. .71½- —
Tobias, bbls.....lb. .55 - .60
Trichloroacetic, bots.....lb. 2.00 - 2.50
Tungstic,[6] CP, 100-lb. pkgs..lb. 2.94 - 3.10
pure, 100-lb. pkgs.....lb. 2.86 - —
Aconite leaves, bls.....lb. 1.40 - 1.45
Root, bls.....lb. 1.55 - 1.60
Aconitine, amorph., bots.....oz.23.00 - 28.00
15-gr. vials.....vial. 1.00 - —
cryst., bots.....oz.42.00 - 48.00
15-gr. vials.....vial. 1.60 - —
Acrylonitrile,[6] dms., frt. alld..lb. .39½- —
5,000 lbs. or more, works..lb. .40 - —
1 ton to 4,999 lbs., works..lb. .40½- —
1 dm. to 1 ton, works.....lb. .41 - —
tankcars, frt. alld.....lb. .39 - —
Adeps lanae,[1] USP, anh., dms.lb. .39 - —
hyd., dms.....lb. .32 - —
Agar,[6] .....lb. 3.50 - —
San Diego, Cal.....lb. 3.00 - —
Agaric, white, bls.....lb. 3.75 - 4.00
Albumen, blood, dark (see Blood, soluble).
light, dms., Chicago.....lb. .65 - .70
Egg, edible,[1] cryst., powd., bbls..lb. 1.80 - —
tech., cryst., bbls.....lb. 1.45 - —
Alcohol, amyl (see also Fusel oil, refd.), ex pentane, dms., c.l., frt. alld. E. of Miss. R..lb. .141 - —
l.c.l., frt. alld.....lb. .151 - —
tanks, frt. alld.....lb. .131 - —
tertiary, refd., dms., l.c.l., frt. alld. E. of Miss. R..lb. .09 - —
Benzyl, cns.....lb. .65 - .75
dms.....lb. .63 - —
Butyl, normal,[1,6] dms., c.l., frt. alld., [a]East..lb. .11¾- .13¼
l.c.l., frt. alld.....lb. .12¼- .15¾
tanks, frt. alld.....lb. .10¾- .14¼

[a] OPA ceiling for East; Western ceiling ½c. per pound higher.

Alcohol, butyl, secondary,[6] dms., c.l., frt. paid E. of Miss..lb. .091 - —
l.c.l., same basis.....lb. .096 - —
tanks, same basis.....lb. .085½- —
tertiary, denat., dms., c.l...lb. .12½- —
l.c.l., dms.....lb. .13 - —
tanks.....lb. .11 - —
Cetyl, dom., CP, fiber ctns., 1,000 lbs..lb. 1.80 - —
smaller lots.....lb. 1.90 - 2.00
Cinnamic, bots.....lb. 3.00 - —
Denatured,[1,2,5] CD14, dms., c.l., dlvd. E..gal. .54½- —
19 dms., wks., E.....gal. .56½- —
1 to 18 dms., wks., E..gal. .59½- —
CD14, tanks, E., dlvd.....lb. .50 - —
Tankcar sales require written authorization by Alcohol Tax Unit.
SD1, 190 pf., bbls., c.l., E. works..gal. .62 - —
18 bbls., E. works..gal. .64 - —
1 to 18 bbls., E. works. gal. .67 - —
tanks, E. works.....gal. .50 - —
Anhydrous 3c. per gal. higher.
SD2B, bbls., c.l., wks., E.gal. .60 - —
19 bbls., works, E..gal. .62 - —
1 to 18 bbls., works, E. gal. .65 - —
tanks, E. works.....gal. .48 - —
CD23G (replaced by SD23H).
SD23H, works, c.l., bbls....gal. .61½- —
19 bbls.....gal. .63½- —
1 to 18 bbls.....gal. .66½- —
tanks, E. works.....gal. .40¼- —
SD29, denatured, with acetaldehyde, bbls., c.l., E. wks.gal. .62¼- —
l.c.l., 19 or more, E. works..gal. .66 - —
1 to 18, E. works....gal. .69 - —
tanks, E. works.....gal. .50¼- —
When any of the several SD29 denaturants is supplied by the purchaser, the prices are the same as those for SD2B, plus 1¼c. per gal. denaturing charge.
Special solvent, dms., c.l., wks. gal. .55¾- —
19 dms., to c.l.....gal. .57¼- —
1 to 18 dms.....gal. .59¼- —
tanks, E. works.....gal. .51 - —
Tankcar sales require written authorization by Alcohol Tax Unit.
Diacetone, acetoone-free, dms., c.l., dlvd..lb. .11¼- .14½
l.c.l., dlvd.....lb. .11¾- .15
tanks, dlvd.....lb. .10¼- .13¼
tech., dms., c.l., dlvd.....lb. .11 - .13½
l.c.l., dlvd.....lb. .11¼- .14
tanks, dlvd.....lb. .10 - .12½
Ethyl,[6] 190 pf., dms., c.l..gal.11.94½- —
19 dms.....gal.11.98 - —
1 to 18 dms.....gal.12.01 - —
tanks.....gal.11.90 - —
absolute, dms., c.l.....gal.11.90 - —
19 dms.....gal.12.50¼- —
1 to 18 dms.....gal.12.66 - —
Grain alcohol is 10c. per gallon higher.
Ethylhexyl, dms., c.l., works..lb. .24 - —
l.c.l., same basis.....lb. .25 - —
tanks, same basis.....lb. .23 - —
Furfuryl, tech., cns., works..lb. .35 - —
dms., c.l., works.....lb. .22½- —
l.c.l., works.....lb. .25 - .35
tanks, works.....lb. .20 - —
Isoamyl (see Carbinol isobutyl).
Isobutyl,[6] refd., dms., works..lb. .0880- —
tanks, works.....lb. .0760- —
Isopropyl,[1,6] refd., 91%, dms., 5 gals., dlvd..gal. .66¼- —
55 gals., c.l., dlvd...gal. .59 - —
l.c.l., dlvd.....gal. .62½- —
tanks, frt. alld.....gal. .54 - —
99%, dms., 5 gals., dlvd..gal. .65 - —
55 gals., c.l.....gal. .44 - —
l.c.l.....gal. .47 - —
tanks.....gal. .37½- —
Methyl (see Methanol).
Octyl (see Ethylhexyl alcohol).
Phenylethyl, bots., cns.....lb. 2.10 - 2.50
Polyvinyl, type A, fiber-pack, Niagara Falls, N.Y., lb. .65 - .70
type B, fiber-pack, same basis, lb. .60 - .65
Propyl, normal, dm. wks..gal. .67 - .70
Tetrahydrofurfuryl, dms., c.l., Waverly, N.Y..lb. .40 - —
smaller lots—some basis..lb. .44 - .50
cns., Cedar Rapids, Ia....lb. .55 - —
Aldehol, denat. grade, dms., tanks, works..gal. .70 - .72
Aldol, dms., works.....lb. .13 - .15
denat., grd., dms.....gal. 1.20 - —
Aletris root, bgs.....lb. .70 - .85
Algin, bbls., fib. dms.....lb. .79 - 1.00
Alizarin (see Red, alizarin).
Alkanet root, bgs.....lb. 1.75 - 1.80
Allspice,[1] Mexican, bgs.....lb. .22 Nom.
Aloe, Cape, cs.....lb. .24 - .25
Curacao, kgs.....lb. .70 - .75
Socotrine, kgs.....lb. .60 - .61
Aloin, bbls., dms., kgs.....lb. 5.45 - 5.54
Alphanaphthol, bbls.....lb. .52 - —
Alphanaphthylamine, bbls.....lb. .32 - —
Alphaterpineol, denat., grade, dms., c.l., works, net weight, lb. .17 - —
Alphatocopherol, amp.....gram. 1.00 - 1.10
Althea root, bls.....lb. .68 - .76
Alum, ammonia,[3] burnt, USP, bbls.; kgs..lb. .16 - .18
gran., bbls., works....100 lbs. 4.00 - —
dlvd., N. Y., Phil..100 lbs. 4.00 - —
lump, bbls., works....100 lbs. 4.25 - —
dlvd., N. Y., Phil..100 lbs. 4.25 - —
powd., bbls., works....100 lbs. 4.40 - —
dlvd., N. Y., Phil..100 lbs. 4.40 - —

Wartime Status of Materials

Applications of WPB and OPA regulations to materials listed in this section are indicated by superior figures as follows:—

1—Specific price ceiling
2—Price agreement (sellers with OPA)
3—General Limitation Order (L order)
4—General Preference Order (M order)
5—Conservation Order (M order)
6—Allocation

Alum, potash, gran., bbls., wks., 100 lbs. 4.25 - —
dlvd., N. Y., Phila. 100 lbs. 4.25 - —
lump, bbls., works 100 lbs. 4.50 - —
dlvd., N. Y., Phila. 100 lbs. 4.50 - —
powd., bbls., works 100 lbs. 4.65 - —
dlvd., N. Y., Phila. 100 lbs. 4.65 - —
Potash, chrome, bbls. lb. .12½- .15
Soda, bbls., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd 100 lbs. 4.25 - 5.00
Alumina acetate, basic solut., 24%, bbls., dlvd. lb. .10½- .11
solut., 20%, bbls., dlvd. lb. .09½- .10
Chloride, anhyd.,[6] com'l, dms. c.l., works lb. .08 - —
l.c.l., works lb. .09 - .12
cryst., com'l, dms., c.l., works, lb. .06 - —
l.c.l., works lb. .06½- .06¾
solut., 32 deg., cbys., c.l., works lb. .02¾- —
l.c.l., works lb. .03¼- —
Fluoride, bbls. lb. .35 - .40
Hydrate,[6] heavy, bgs., c.l., works lb. .0310- —
bbls., c.l., works lb. .0340- —
l.c.l., works lb. .04 - —
light, bgs., dlvd. lb. .14½- —
bbls., dlvd. lb. .15 - —
Hydroxide gel, USP purity, conc., 9-9½% Al_2O_3, fib. dms., works lb. .17¾- —
contract, wks. lb. .16¾- —
14-15% Al_2O_3, fib. dms. lb. .20¾- —
contract, wks. lb. .19¾- —
dried, USP XII, fib. dms., works lb. .78 - —
contract, wks. lb. .75 - —
powd., USP IX, bbls., dms. lb. .15 - .19
Oleate, dms., contract lb. .24½- —
Palmitate, precip., bbls. lb. .25 - .26
Resinate, precip., dms. lb. .15½- —
Stearate, precip., bbls., c.l. lb. .23 - —
l.c.l. lb. .24 - —

Alumina sulphate, com'l, bgs., c.l., works, frt. equald. 100 lbs. 1.15 - 1.25
l.c.l., works, frt. equald., 100 lbs. 1.40 - 1.50
bbls., c.l., works, frt. equald. 100 lbs. 1.35 - 1.45
l.c.l., works, frt. equald., 100 lbs. 1.60 - 1.70
iron-free, bgs., c.l., works, 100 lbs. 1.75 - 1.85
l.c.l., works 100 lbs. 2.00 - 2.10
Aluminum, 98-99%, c.l. lb. .15 - —
l.c.l. lb. .16 - —
paste, lining, extra fine, dms., ship't pt. lb. .52 - .57½
ink, dms., ship't pt. lb. .66½- .72½
standard, dms., ship't pt., lb. .83½- .89¼
powder, lining, extra fine, dms., ship't pt. lb. .88½- .94½
litho, dms., same basis lb. .52½- .58½
standard, dms., ship't pt., lb. .54½- .61
rubber comp., dms., ship't pt., lb. .39½- .41½
unpolished, stand., dms., ship't pt. lb. .31½- .37½
varnish, stand., dms., ship't pt. lb. .39½- .41¼
Ambergris, gray, tins oz. 17.00 -18.00
Aminomethylpropanol, cns., dms., wks. lb. .50 - .60
Aminopyrine, dms. lb. 4.00 - —
Abots. lb. 4.25 - —
Ammonia,[6] anhydrous, fertilizer, cyls., works, frt. equal. ton. 90.00 - —
refrigeration, tanks, works. lb. .05 - —
pure, cyls. lb. .16 - —
Aqua, 26°, cbys. lb. .05¼- —
dms., c.l. lb. .02¼- —
l.c.l. lb. .02½- —
tanks, works (NH_3 content). lb. .04 - —

Ammonia, benzoate, refined, dms., kgs., 4,000 lbs. up, frt. alld., lb. .43 - —
smaller lots, frt. alld. lb. .44 - .47
Bicarbonate, dms. lb. .0530- .0614
Bichromate, bbls. lb. .23 - .25
Bifluoride, bbls. lb. .15 - .17
Borate, gran., bbls., kgs. lb. .1080- —
powd., bbls., kgs. lb. .1130- —
Bromide, NF, bbls. lb. .31 - .35
dms. lb. .32 - .36
Carbonate, lump, dms. lb. .08½- .09¼
cns. lb. .14¼- .17¼
powdered, 1c. per lb. higher.
Chloride, tech. (see Ammoniac, sal).
USP, gran., bbls., fib, dms., kgs. lb. .13 - .15
Citrate, dibasic, bbls. lb. .75 - —
dms. lb. .80 - .85
Fluoride, bbls. lb. .18 - .20
Hydroxide (see Ammonia, aqua).
Hypophosphite, NF, dms. lb. 1.25 - 1.27
jars lb. 1.30 - 1.35
Iodide, NF, bots. lb. 3.71 - —
jars lb. 3.65 - —
Linoleate, 80%, anhyd., bbls. lb. 12 - —
Molybdate,[6] c.p., cryst., kgs. lb. 1.26 - 1.28
fine cryst., bbls., kgs. lb. .84 - .87
purified, dms. lb. 1.10 - 1.12
Nitrate, fertilizer grade, mixture with limestone, 34% nitrogen, bgs., Ft. Robinson, Ontario ton. 47.65 -48.05
tech., bgs., works ton. 8.35 - 8.50
bbls., works 100 lbs. 4.55 - —
Oleate, dms. lb. .14 - —
Oxalate, purif., gran., bbls., kgs. lb. .27 - .33
Perchlorate, kgs. lb. .55 - .65
Persulphate, kgs. lb. .25½- .28½
Phosphate, dibasic, NF V, bbls., kgs. lb. .31 - .39
tech., bbls., c.l. lb. .07¼- —
l.c.l. lb. .08 - .08½

Ammonia phosphate, monobasic, pure, bbls. lb. .40 - .45
tech., bbls., c.l. lb. .07¼- —
l.c.l. lb. .08 - .08½
Salicylate, N.F., dms., kgs. lb. 1.15 - 1.18
Silicofluoride, bbls. lb. .15 - .18
Stearate, anhydrous, dms. lb. .34 - —
paste dms. lb. .08¼- —
Sulphamate, bbls., wks. lb. .18 - .24
Sulphate,[1,6] dms., bulk, inland producing ovens ton. 28.20 - —
Atlantic Coast ports ton. 29.20 - —
Sulphide, liquid, 40-45%, basis, 100%, dms., c.l., works lb. .07½- —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .07¼- —
red, 48%, cbys., works lb. .08 - —
dms., works lb. .06 - —
yellow, 32%, cbys., works lb. .05 - —
dms., works lb. .06 - —
Sulphocyanide, CP, dms. lb. .45 - .97½
tech., bbls. lb. .17 - —
Ammoniac, gum (see Gum, ammoniac).
Sal, gray, bbls., c.l., works, 100 lbs. 5.50 - 5.75
l.c.l., same basis 100 lbs. 6.00 - 6.70
white, gran., bbls., c.l., works, 100 lbs. 4.45 - —
l.c.l., same basis 100 lbs. 5.15 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., dlvd. lb. .12 - .18
l.c.l. dlvd. lb. .12½- .17½
tanks, dlvd. lb. .11½- .16
ex-pentane, dms., c.l., frt. alld. E. of Miss. R. lb. .15½- —
l.c.l., same basis lb. .16½- —
tanks, same basis lb. .14½- —
Alcohol (see Alcohol, amyl).
Butyrate, dms. lb. .75 - .90
Caproate, cns. lb. 2.75 - —
Chloride, mixed, tech., dms., c.l., works lb. .07 - —
l.c.l., works lb. .08 - —
tanks, works lb. .06 - —
Ether, dms., c.l., works lb. .09½- —
l.c.l., works lb. .10½- —
tanks, works lb. .08¼- —
Nitrite, USP, bots. lb. 1.72 - 1.80
Mercaptan, dms., wks. lb. 1.10 - —
Oleate, dms., works lb. .31 - —
Salicylate, bots. lb. .85 - 1.25
Stearate, dms., works lb. .32½- —
Amylene, dms., c.l., works lb. .10¼- —
l.c.l., works lb. .11 - —
tanks, works lb. .09 - —
Amylnaphthalenes, mixed, crude, dms., works lb. .14 - —
refd., dms., works lb. .16 - —
Anethol, bots. lb. 2.35 - 2.40
cans lb. 2.25 - 2.30
Angelica root, dom., pls lb. .35 - .50
import, natural, bls. lb. 3.25 Nom.
Angostura bark, bls. lb. .20 - .21
Anilin oil,[6] dms., c.l., works, frt. alld. lb. .11½- —
l.c.l., works, frt. alld. lb. .12½- —
tanks, works, frt. alld. lb. .10½- —
Salt, dms., works lb. .22 - .24
Anise,[1] Cyprus, bgs. lb. .36 - .37
Ecuador, bgs. lb. .33 - .34
Mexican, recleaned, bgs. lb. .30 - .30½
Spanish, bgs. lb. .38 - .38½
Star lb. .47½- .48
Syrian, bgs. lb. .29 - .30
Turkish, bgs. lb. .33 - .34
Anisic aldehyde, bots. lb. 3.25 - 3.35
Annatto[5] paste, bxs. lb. .34 - .39
Seed, bgs. lb. .06 - —
Anthracene, 80-85%, bbls., works, lb. .55 - —
90%, bbls., works lb. .65 - —
Anthraquinone, 99.5%, bbls. lb. .70 - —
Antimony butter (see Antimony chloride).
Chloride, solut., cbys. lb. .17 - —
Metal,[2,6] bulk, c.l., works lb. .14½- —
Needle, Bolivian, brown, 67%, cs. lb. .18½- —
Chinese, black, 70%, cs. lb. .20 - .22
Oxide,[6] bgs., c.l. lb. .15 - —
l.c.l. lb. .15½- —
Salt, 65%, bbls., dlvd. E. of Miss. River lb. .40 - —
Sulphide, 65-70%, bbls., c.l., works lb. .17 - —
l.c.l., works lb. .17¼- —
Antipyrine, bbls., kgs., ton lb. 2.00 - —
smaller lots lb. 2.10 - 2.20
Apomorphine, bots. oz. 23.20 -23.70
Archil extract, bbls. lb. .26 - —
Areca nuts, powd., bbls. lb. .25 - .26
Arecolin hydrobromide, bots. oz. 11.25 -11.50
Argols, min. 70%, bgs., Argentine port, 100 kilos, 100% purity. 62.00 - —
Spanish port, 100 kilos, 100% purity. 62.60 - —
Arnica flowers, bls. lb. 3.00 - 3.50
Root, bls. lb. 1.00 - 1.25
Arrowroot, powd., bgs. lb. .09½- .10
bbls. lb. .10 - .10½
Arsenic,[6] metal, lump, c.l. lb. No prices
Chloride (arsenous), bots. 1.55 - —
Iodide (arsenous), 5-lb. bots. lb. 5.55 - —
jars lb. 5.45 - —
Sulphide, yellow, bbls. lb. .52 - .55
bots. lb. .60 - .64
Trioxide (see Acid, arsenous).
White, powd., kgs., c.l. lb. .04 - —
l.c.l. lb. .04¾- —
Asafetida, cs. lb. .55 - .60
powd., cs. lb. .80 - .85
Asbestine (see Talc, N. Y. dibrous).
Asbestos fiber, 5D and 5K, bgs., c.l. (20 tons), Canad. mines, ton. 49.50 - —
5R, bgs., same basis ton. 44.60 - —
6D, bgs., same basis ton. 33.00 - —
7D, bgs., same basis ton. 28.50 - —
7F, bgs., same basis ton. 26.50 - —
7H, bgs., same basis ton. 22.50 - —
7K, bgs., same basis ton. 19.50 - —
7M, bgs., same basis ton. 16.50 - —
7R, bgs., same basis ton. 15.50 - —
Asphaltum, Manjak No. 10, crude, dms., works lb. .05½- .12
process form, bgs., wks. lb. .05¾- .18
jet, bgs., 2,000 lbs., gross weight Colo. mines ton. 30.00 - —
Barbados, Dunellen, N. J. lb. .10½- —
California, dms., c.l. ton. 38.40 - —
l.c.l. ton. 41.40 - —
Cuban A, bgs., c.l. ton. 60.00 - —
l.c.l. ton. 90.00 - —
B, bgs., c.l. ton. 35.00 - —
l.c.l. ton. 55.00 - —
Egyptian, bgs. lb. .12 - —
l.c.l. lb. .15 - —
Gilsonite, brilliant black, selects, 340 F. fusing point, bgs., mines ton. 32.90 - —
seconds, 370-390 F. fusing point, not uniform, same basis ton. 25.50 - —
brilliant, selects, 290-295 F. fusing point, same basis ton. 30.50 - —
270 F. fusing point, same basis ton. 30.50 - —
seconds, 300-330 F. fusing point, not uniform, same basis ton. 25.50 - —
jet, bgs., 2,000 lbs. gross weight, Colo. mines ton. 30.50 - —
Mexican, ref'd, dms., Texas, refinery ton. 21.00 - —
l.c.l., refinery ton. 21.00 -22.00
tanks, refinery ton. 16.00 - —
Atropine, bots. oz. 15.00 - —
Sulphate, bots. oz. 8.10 - —

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General Chemical Company—long a major producer of Sulfuric Acid and Oleum—offers Anhydrous Hydrofluoric Acid to all alkylate producers using this catalyst.

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* * *

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Pacific Northwest Technical Service Offices: Wenatchee (Wash.) • Tacoma (Wash.)
In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver

SPECIAL CHEMICALS

Anhydrous Hydrofluoric Acid is one of *many* chemicals which has recently sprung into a position of prime industrial importance. If you are interested in this material for *any* use, please feel free to let us know

Cooperating with industry toward furnishing *"special"* chemicals in commercial quantities *is part of our service to American enterprise.* If you are using such chemicals, it will pay you to investigate General Chemical's service in furnishing your requirements!

B

Balm of Gilead buds, bgs.....lb. .62 - .63
Barbasco root,[20] (see cube root).
Barberry bark, bgs.....lb. .75 - .90
Tree bark, bls.....lb. No stocks
Barbital, cs., dms.....lb. 3.50 - 3.60
sodium, cs.....lb. 3.75 - —
Barium carbonate, natural, 98% thru 200 mesh, bgs., c.l., works...ton.43.00 - —
precip., bgs., c.l., works...ton.55.00 - —
l.c.l., works.....ton.60.00 - —
bbls., c.l., works.....ton.60.00 - —
l.c.l., works.....ton.65.00 - —
sulphur-free, c.l., works...ton.60.00 - —
l.c.l., works.....ton.65.00 - —
Chlorate,[2] kgs.....lb. .38 - —
Chloride, CP, cryst., bbls....lb. .25 - .27
pure, bbls., kgs.....lb. .10 - .12
tech., dom., cryst., Zone 1, bgs., c.l., dlvd..ton.77.00 - —
l.c.l., dlvd.....ton.90.00 - —
bbls., c.l., dlvd.....ton.79.00 - —
l.c.l., dlvd.....ton.92.00 - —
Zone 2, bgs., c.l., dlvd..ton.81.00 - —
l.c.l., dlvd.....ton.94.00 - —
bbls., c.l., dlvd.....ton.83.00 - —
l.c.l., dlvd.....ton.96.00 - —
Zone 3, bgs., c.l., dlvd..ton.87.00 - —
l.c.l., dlvd...ton.100.00 - —
bbls., c.l., dlvd.....ton.89.00 - —
l.c.l., dlvd.....ton.102.00 - —
Zone 4, bgs., c.l., dlvd..ton.88.00 - —
l.c.l., dlvd.....ton.96.00 - —
bbls., c.l., dlvd.....ton.102.00 - —
l.c.l., dlvd.....ton.115.00 - —

Barium chloride, technical zones are as follows:—Zone 1. New England States, N. Y., N. J., Pa., Md., Va., Ohio, Mich., Ind., Ill., Wis., Ky., and principal cities on west bank of Miss. R., north of Miss., north of Ark., line. Zone 2. Tenn., No. and So. Carolina, Ga., Ala., Miss., and Fla. Zone 3. Minn., Ia., Mo., Col., N. Mex., Idaho, Utah and Ariz. Zone 4. Wash., Ore., Calif., and Nev.

Dioxide, dms., c.l., works....lb. .10 - —
l.c.l., same basis.....lb. .12 - .13
Fluoride, bbls.....lb. .18 Nom.
Hydrate (see Hydroxide).
Hydroxide, bbls., works.....lb. .06 - .07
Iodide, bots.....lb. 4.62 - 4.62
Monoxide (see Oxide).
Nitrate, cks.....lb. .11 - .12
Oxide, ungrd., dms., c.l., wks. lb. .09 - —
l.c.l., same basis.....lb. .10 - .12
grd. dms., l.c.l., works....lb. .11 - .13
Peroxide (see Dioxide).
Silicofluoride, bbls.....lb. .17 - .19
Stearate, ctns. (50 lbs. each), ton and carload lots..lb. .31 - —
less than ton lots.....lb. .32 - —
Sulphate, tech. (see Barytes and blanc fixe).
X-ray, bbls.....lb. .09½ - .10
kgs.....lb. .12 - —
Barytes, dom., floated, bbls., c.l., St. Louis..ton.27.65 - —
l.c.l., same basis.....ton.28.65 - —
ex whse., N. Y.....ton.36.00 - —
paper bags, c.l., St. Louis, ton.25.25 - —
l.c.l., same basis.....ton.26.25 - —
ex whse. N. Y.....ton.34.00 - —
Southern off color, bgs., mines..ton.17.50 - —
96.75%, bgs., mines.....ton.18.00 - —
ore, bulk, mines.....ton. 8.00 - —
Bauxite,[4] bulk, mines.....ton.7.00 -10.00
Bay leaves (see Laurel leaves).
Bay rum, bbls.....gal. 1.40 - 1.50
Bayberry bark, bgs.....lb. .12 - .13
Belladonna leaves, bls.....lb. 1.30 - 1.35
Root, bls.....lb. .90 - 1.00
Bentonite, 200 mesh., bgs., Wyo. works..ton.11.00 - —
325 mesh, bgs., Wyo., works... ton.16.00 - —
Benzaldehyde, tech., cbys., dms. lb. .45 - .55
NF VII, dms., 50 to 100 lbs..lb. .85 - —
5 to 25 lbs.....lb. .90 - .95
Benzene (see Benzol).
Benzidin base, bbls.....lb. .70 - —
Benzocaine, cns.....lb. 3.20 - 3.55
Benzol,[2,6] 90%, dms., returnable, works..gal. .20 - —
tankcars, frt. alld. up to 2c. per gal..gal. .15 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .15 - —
Benzophenone, dms.....lb. 1.15 - 1.20
Benzoyl chloride, cbys.....lb. .23 - .24
Peroxide, pure, gran., fib. ctns., works..lb. 1.95 - —
Benzyl acetate, f.f.c., cns.....lb. .59 Nom.
dms.....lb. .55 Nom.
Alcohol (see Alcohol, benzyl).
Benzoate, a.m.s., f.f.c., dms.lb. 1.00 - 1.10
Benzyl, chloride, cbys., frt. equal lb. .22 - .24
Cinnamate, cns.....lb. 5.15 - 5.50
Formate, cns.....lb. 3.50 - 3.75
Isoeugenol, bots.....lb. 9.50 - —
Propionate, bots.....lb. 4.00 - —
Salicylate, bots.....lb. 1.90 - 2.15
Benzylidineacetone, bots.....lb. 3.00 - 3.25
Berberine bisulphate, cns.....lb.22.50 -23.50
Hydrochloride, cns.....lb.22.50 -23.50
Sulphate, cns.....lb.22.50 -23.50
Berberin root, bls.....lb. .13 - .14
Betanaphthol, sublim., kgs....lb. .55 - —
tech., bbls., c.l., works....lb. .23 - —
l.c.l., bbls., works.....lb. .24 - —
Benzoate, fib. dms.....lb. 1.75 - —
Salicylate, dms.....lb. 5.00 - —
Betanaphthylamine, tech., kgs.lb. .51 - —
Beth root, bls.....lb. .33 - .35
Bismuth[2] chloride, 5-lb. bots..lb. 3.00 - —
jars.....lb. 2.85 - —
Citrate, USP VIII, bots.....lb. 2.56 - —
jars.....lb. 2.75 - —
Hydroxide, 5-lb. bots.....lb. 2.85 - —
cns.....lb. 2.25 - —
Metal, ton lots.....lb. 1.25 - —
Nitrate, cryst., 5-lb. bots....lb. 1.45 - —
cns.....lb. 1.30 - —
Oxychloride, 5-lb. bots.....lb. 2.19 - —
cns., kgs.....lb. 2.10 - —
Subbenzoate, 5-lb. bots.....lb. 2.51 - —
fib. dms.....lb. 2.40 - —
Subcarbonate, bots., cns.....lb. 1.52 - 1.62
175-lb. bbls., dms.....lb. 1.50 - —
X-ray, 5-lb. bots.....lb. 2.70 - —
fib. dms.....lb. 2.72 - —
Subgallate, bots., cns.....lb. 1.49 - 1.55
fib. dms.....lb. 1.40 - 1.42
Subiodide, bots.....lb. 4.24 - —
fib. dms.....lb. 4.18 - —
Bismuth subnitrate, powd., bots., cns..lb. 1.23 - —
bbls., dms.....lb. 1.20 - —
Subsalicylate, 60-66%, bots..lb. 2.59 - —
bbls., fib. dms.....lb. 2.50 - —
Sulphocarbolate, 5-lb. bots..lb. 3.76 - —
fib. dms.....lb. 3.65 - —
Trioxide, powd., 5-lb. bots..lb. 3.76 - —
cns.....lb. 3.65 - —
Bismuth ammonia, citrate, USP, powd., 25-lb. dms..lb. 2.40 - —
5-lb. cns.....lb. 2.45 - 2.50
Black,[2] acetylene, c.l., works..lb. .14 - —
Bone, 1A, c.l.....lb. .17 - —
l.c.l.....lb. .17½ - —
2, c.l.....lb. .18 - —
l.c.l.....lb. .18½ - —
3, c.l.....lb. .12 - —
l.c.l.....lb. .12½ - —
4, c.l.....lb. .11 - —
l.c.l.....lb. .11½ - —
Black, bone, 5, c.l.....lb. .08½ - —
l.c.l.....lb. .09 - —
6, c.l.....lb. .0?½ - —
l.c.l.....lb. .09 - —
7, c.l.....lb. .11½ - —
l.c.l.....lb. .12 - —
8, c.l.....lb. .12½ - —
l.c.l.....lb. .13 - —

Bone black prices are for barrels or bags, freight allowed East. Pacific Coast prices are 1½c. per lb. higher, ex dock or ex whse.

Carbon,[2] regular, uncompressed, bgs., c.l., f.o.b. plants..lb. .06625 - —
l.c.l., bgs., ctns., f.o.b. whse..lb. .09 - —
dlvd.....lb. .09 - —
beads, compressed, bgs., c.l., f.o.b. plants..lb. .03550 - —
l.c.l., bgs., ctns., f.o.b. whse..lb. .07½ - —
dlvd.....lb. .07½ - —
Charcoal (see C).
Graphite (see G).
Iron oxide, magnetic, pure, bbls., l.c.l., works..lb. .85½ - —
Lamp, 1, ctns., c.l., works..lb. .07½ - —
l.c.l., works.....lb. .09 - —
2, ctns., c.l., works.....lb. .10 - —
l.c.l., works.....lb. .11 - —
2A, ctns., c.l., works.....lb. .11 - —
l.c.l., works.....lb. .12 - —
3, ctns., c.l., works.....lb. .14½ - —
l.c.l., works.....lb. .15½ - —
4, ctns., c.l., works.....lb. .16½ - —
l.c.l., works.....lb. .17½ - —
5, ctns., c.l., works.....lb. .18½ - —
l.c.l., works.....lb. .20 - —
6, ctns., c.l., works.....lb. .26½ - —
l.c.l., works.....lb. .27½ - —
7, ctns., c.l., works.....lb. .37½ - —
l.c.l., works.....lb. .40 - —
Mineral, vine type, bbls., l.c.l., f.o.b. works..lb. .04¾ - —
Vine, A, bbls., works or N.Y..lb. .04½ - .06
B, bbls., works or N. Y....lb. .06½ - —
kegs, f.o.b. N. Y.....lb. .06 - —
dms., c.l., frt. alld.....lb. .09½ Nom.

Black dyes or listed under Dyes.

Black haw root bark, bls.....lb. .40 - .41
Tree bark, bls.....lb. .26 - .27
Black Indian hemp root, bls...lb. .20 - .25
Blanc fixe, dry, by-product, bgs., c.l., works..ton.60.00 - —
l.c.l., works.....ton.67.50 - —
direct process, bgs., c.l., f.o.b. Huntington, W. Va...ton.70.00 - —
bbls, same basis.....ton.75.00 - —
l.c.l., same basis....ton.72.00 - —
bbls., same basis...ton.80.00 - —
pulp, 60%%, bbl., c.l., wks.ton.46.00 - —
l.c.l., same basis....ton.46.80 - —
Bleaching powder,[2,6] dms., c.l., works..100 lbs. 2.50 - 2.10
l.c.l., works.....100 lbs. 2.75 - 2.85
Blood, dried, dom., 16-16½% ammon., bgs., f.o.b. N.Y. unit-ton. 4.95 - —
high-grade, unground, 16-17% ammon., bulk, f.o.b. Chicago..unit-ton. 5.25 - —
soluble, bgs., c.l., Chicago, lb. .13½ - —
smaller lots, Chicago.....lb. .15 - .20
Bloodroot, bls.....lb. .45 - .46
Blue,[2] alkali, toner, bbls., dlvd. N. of Tenn. and N. C. R. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. .85 - .90

Alkali blue toner prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1½c.), Miss., N. C., S. C., Tenn., Tex. (Dallas, Ft. Worth, 1½c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago

Blue, bronze, bbls., same basis, contracts..lb. .36 - —
Celestial, bbls.....lb. .10 - .12
Chinese, bbls., same basis, contracts..lb. .36 - —
Cobalt,[2] genuine, 1-kilo pkg.lb. 4.00 - —
Imitation (see Blue, ultramarine).
Copper phthalocyanin, full strength, bbls., works, frt. alld..lb. 3.50 - 3.75
80%, same basis.....lb. 3.30 - —
Milori, bbls., same basis, contracts..lb. .36 - —
Molybdated, Victoria, same basis, contracts..lb. 3.15 - —
Peacock, fugitive, 100% color strength, works..lb. .52 - —
Potash, dms., bbls., same basis, contracts..lb. .42 - —
Prussian, bbls., same basis, contracts..lb. .36 - —
permanent, toner, green shade tungatic, works..lb. 4.00 - —
Ultramarine, dry or pulp, cobalt grades, bbls., works, frt. equald..lb. .28 - .97
job grades, bbl., same basis lb. .19 - .25
reg. grades, bbls., same basis lb. .17 - .27

Blue, ultramarine, dlvd. ex whse., 1c lc. higher; Pac. Coast, ex whse., 2c. higher; 100-lb. bgs., 1c. above bbls.; 25-lb. boxes, 5c. above bbls.

Victoria ink toner, bbls., same basis, alkali toner..lb. 1.55 - —
syn. vehicle, bbls., same basis lb. 1.95 - —
Victoria, toner, tungstic, bbls., works..lb. 3.30 - —
molybdic, same basis.....lb. 3.15 - —
Violet toner, molybdic, kgs., works..lb. 1.25 - —
tungstic, same basis.....lb. 2.10 - —

Blue dyes are listed under Dyes.

Bluegag root, bls.....lb .20 - .30
Blue mass, USP, cna., tube....lb. 1.67 - 1.84
powd., bots., cna., dms.....lb. 1.70 - 1.84
Bluestone (see Copper sulphate).
Blue vitriol (see Copper sulphate).
Bone, raw, dom., indus., Chi.ton.57.50 -65.00
junk, same basis.....ton.31.00 - —
meal, raw, dom., 4½% ammon., 50% phos., bgs., f.o.b. Eastern works..ton.37.50 - —
Chicago, works....ton.39.50 - —
steamed, dom., feeding grade, 1% ammon., 60% phos., bgs., f.o.b. E. wks....ton.47.00 - —
Chicago, works....ton.51.00 - —
fertilizer grade, 2% ammon., 50% phos., bgs., E. wks.ton.38.50 - —
Chicago, works..ton.37.00 - —
Phosphate, precip. (see Calcium phosphate tribasic precip.).
Boneset leaves, bls.....lb. .12 - .13
Borage flowers, bls.....lb. .70 - .95
Borax,[2] tech., 99½% gran., bulk, c.l., frt. alld..ton.41.50 - —
bgs., c.l., frt. alld.....ton.45.00 - —
ton lots, ex whse.....ton.58.00 - —
less ton lots, ex whse.ton.61.00 - —
bbls., c.l., frt. alld.....ton.65.00 - —
ton lots, ex whse.....ton.66.00 - —
less ton lots, ex whse.ton.71.00 - —
powd., bgs., frt. alld....ton.50.00 - —
ton lots, ex whse.....ton.61.00 - —
less ton lots, ex whse.ton.66.00 - —
bbls., c.l., frt. alld.....ton.65.00 - —
ton lots, ex whse.....ton.71.00 - —
less ton lots, ex whse.ton.66.00 - —

USP, $15 per ton higher.

SPOT DELIVERIES

FORMIC ACID

Sodium Benzoate
Benzaldehyde
Terpin Hydrate, U.S.P.
Sodium Sulfite
Heavy Calcined Magnesia

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Bordeaux mixt., dms., c.l. ..... lb. .11 - —
l.c.l., dms. ..... lb. .11½- —

Bordeaux mixture prices are works or whse. basis, frt. alld. to dest., in lots of 90 lbs. and over, no trucking or freight allowance for works or warehouse pickups.

Brazilwood extract (see Hypernic).
Brimstone (see Sulphur).
Bromine, purif., cs., 1,000 lbs., frt. alld. E. of Rockies .. lb. .25 - .30
single pkgs., same basis .. lb. .30 - .35
Bromoform, USP, 100 lbs. .. bots. 1.50 - —
Bromstyrol ..... lb. 4.90 - 5.00
Bronze powder, aluminum (see A).
Gold, litho., cns., dms. ..... lb. .60 - .65
moulding, cns., dms. ..... lb. .90 - 1.00
printing inks, cns., dms. .. lb. .85 - 1.20
radiator, cns., dms. ..... lb. .45 - .50
Broomtops, bls. ..... lb. .16 - .18
Brown,[2] iron oxide, pure, precip., cks., f.o.b. N.Y. .. lb. .12 - —
Metallic, iron oxide, bbls., wks. lb. .02½- —
paper bgs., c.l., works .... lb. .0225- —
Sap, crystals, dom., works .. lb. .12 - —
powdered ..... lb. .13 - —
Sienna, burnt, American, bbls., f.o.b. works .. lb. .03¾- .05
Italian, Amer. replacement type, bbls., f.o.b. works lb. .08¾- .10¾
raw, American, bbls., wks. .. lb. .04 - .10
Italian, Amer. replacement type, bbls., f.o.b. wks. lb. .08 - .10
Umber, Amer., bbls., works .lb. .03¾- —
Italian type, Amer. replacement, bbls., works .. lb. .04¾- —
Turkey type, bbls., l.c.l., f.o.b. Boston, Bethlehem, Easton, Pa., N. Af. .. lb. .04¾- —
St. Louis, Chicago, Indianapolis, New Orleans .. lb. .05½- —
Kansas City .. lb. .05¾- —
Minneapolis .. lb. .0535- —
Pittsburgh .. lb. .05 - —

Brown, umber, Amer., Turkey type, ex car, Los Angeles .lb. .05¾- —
Portland, San Francisco, Seattle .. lb. .05½- —
ex whse. Los Angeles .lb. .05¾- —
Portland, San Francisco, Seattle .. lb. .05¾- —
Vandyke, regular, bbls., l.c.l., works .. lb. .09 - —
special, bbls. ..... lb. .12 - —
Brucine, 100 oz. cns. ..... oz. .35 - —
Sulphate, 100 oz. cns. ..... oz. .30 - —
Byronia root, bls. ..... lb. .85 - .90
Buchu leaves, bls. ..... lb. .80 - .82
Buckthorn bark, true, bls. .... lb. .82 - .84
cut and sifted, bbls. .... lb. No stocks
Berries, bgs. ..... lb. .70 - .75
Burdock root, bls. ..... lb. .32 - .33
Burgundy pitch, dom., dms. .. lb. .06 - —
Butane,[1] industrial grade, tanks, f.o.b. Group 3 .. gal. .03 - .03½
Butternut bark, bls. ..... lb. .08 - .09
Butyl acetate,[1] norm., dms., c.l. frt. alld. .. lb. .1240- .1575
l.c.l., frt. alld. ..... lb. .1225- .1675
tanks, frt. alld. ..... lb. .1115- .1475
secondary, dms., c.l., frt. pd. E. of Miss. R. .. lb. .09½- —
l.c.l., same basis ..... lb. .10 - —
tanks, same basis ..... lb. .09½- —
Alcohol (see Alcohol).
Aldehyde, dms., c.l., wks. .. lb. .15½- —
l.c.l., works ..... lb. .16½- —
tanks, works ..... lb. .14½- —
Carbinol, secondary, l.c.l., dms., works .. lb. .60 - —
Chloride, normal, dms., c.l., works .. lb. .32 - —
l.c.l. works ..... lb. .35 - —
Ether (see under Ether).
Lactate, dms. ..... lb. .20½- —
Laurate, dms., works ..... lb. .42 - —
Myristate, dms., works ..... lb. .41 - —
Oleate, ref'd, dms., works .. lb. .33 - —
tech., dms., works ..... lb. .29 - —

Butyl phenylacetate, dms. ..... lb. 2.00 - 2.25
Phthalate,[3] dms. frt. alld. E. of St. Louis .. lb. .20½- .21½
Propionate, dms., dlvd ..... lb. .14½- .17
tanks ..... lb. .15½- —
Stearate, dms. ..... lb. .21 - —
Butyric ether, bots. ..... gal. 6.50 - 6.95
dms., works ..... lb. .45 - —
dms., frt. alld. Met. N.Y. .. lb. .60 - —

C

Cadmium bromide,[4] 25-lb. jars, 50 lbs. or more .. lb. 1.05 - 1.06
single jars ..... lb. 1.70 - —
5-lb. bots. ..... lb. 1.84 - 1.91
Iodide,[4] 5-lb. bots. ..... lb. 4.23 - —
25-lb. cans ..... lb. 4.09 - —
Lithopone (see Yellow).
Cadmium metal,[1,4] pat., shapes, cs., dlvd. .. lb. .95 - —
Ingots or sticks ..... lb. .90 - —
Red (see Red).
Selenide (see Red).
Sulphite (see Yellow).
Caffeine,[1] dms., makers, primary distrib., 100 lbs. or more .. lb. 2.80 - 2.88
25 to 100 lbs. ..... lb. 2.95 - 3.10
smaller lots. ..... lb. 3.15 - 3.25
Caffeine, anhydrous, dms., 100 lbs. or more .. lb. 3.00 - 3.08
25 to 100 lbs. ..... lb. 3.15 - 3.30
smaller lots. ..... lb. 3.35 - 3.45
Citrated,[1] dms., makers, primary distrib., 100 lbs. or more .. lb. 1.95 - —
smaller lots. ..... lb. 2.05 - 2.30
Hydrobromide, bots. ..... lb. 5.29 - 5.37
Calabar beans, bgs. ..... lb. .35 - .40
Calamus root, dom., bls. .... lb. .30 - .45
Calcium acetate, bgs., dlvd. .... 100 lbs. 3.00 - 4.00

Calcium arsenate,[6] bgs., c.l. .. lb. .07 - .08
l.c.l. ..... lb. .07½- .08½

Calcium arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 90 lbs. or over; no frt. or truck allowances for paint or whse. pick-up.

Bromide, 100 lbs., works, frt. equald. .. lb. .65 - —
50 lbs., works ..... lb. .67 - —
25 lbs., works ..... lb. .70 - —
Carbide,[6] dms., c.l., dlvd. .... 100 lbs. 4.75 - —
l.c.l., f.o.b. whse. .... 100 lbs. 4.85 - —
Carbonate (see Chalk and Whiting).
Chloride, flake, paper bgs., 77-80%, c.l., dlvd. .. ton. 18.50 -35.00
l.c.l., 15 tons, dlvd. .. ton. 21.50 -35.50
5-ton lots ..... ton. 28.50 -41.00
liquer, basis 40%, tanks, wks., ton. 7.50 - —
solid, dom., 73-75%, dms., c.l., dlvd. .. ton. 18.00 -31.50
15 tons, dlvd. ..... ton. 21.45 -25.45
5-ton lots ..... ton. 28.45 -40.95

Calcium chloride prices vary according to zone. Car lot prices for flake in burlap paper-lined bags, $2.50 per ton over paper bags, drums $3.50 per ton over paper bags.

purified, cryst., 100-lb. lots, bbls., jars .. lb. .28 - —
smaller lots, bbls., jars, bots. lb. .29 - .30
Gluconate, USP, gran., bbls. .lb. .52 - —
dms. ..... lb. .57 - .58
cns. ..... lb. .70 - —
Powd., 2c. per lb. lower.
Glycerophosphate, fib. dms., 1,000-lb. lots .. lb. 1.28 - —
100-lb. lots ..... lb. 1.40 - —
cns., 25 lbs. ..... lb. 1.65 - —
Hypophosphite, cns. ..... lb. .62 - .65
Iodide, bots., jars ..... oz. 4.04 - 4.19
Lactate, USP, bbls., 200 lbs. .lb. .32 - .33
Mandelate, dense, dms. .... lb. 2.05 - 2.30
fluffy, dms. ..... lb. 2.05 - 2.30
Palmitate, bbls. ..... lb. .28 - .29
Pantothenate, dex., 100-gram bots. .. per gram. .50 - —
Phosphate, dibasic, precip., 38-40% P_2O_5, bgs., c.l.f. Atlantic ports, shipt. unit-ton. No prices.
feeding grade, bgs., works, ton. 75.00 - —
food grade, works, 16 bbls. or over .. lb. .07 - .07¾
5 to 9 bbls., same basis, lb. .08 - .09
1 to 4 bbls., same basis, lb. .10 - —
medicinal, bbls. ..... lb. .11½- .12
dms. ..... lb. .12½- .18
monobasic, cryst., bgs., c.l., works, frt. equald. .. lb. .05¾- —
5 tons and over, bgs., same basis .. lb. .06 - —
less than 5 tons, same basis .. lb. .06¼- —
tribasic, bbls., c.l., works .. lb. .0685- —
l.c.l. ..... lb. .0705- .0785
Resinate, precip., bbls., ten lots, lb. .15 - —
smaller lots. ..... lb. .16 - —
Silicate, hydrated, 50-lb. pap. bgs., c.l., works .. lb. .05½- —
l.c.l., works ..... lb. .06 - —
Stearate, precip., bbls., c.l. .lb. .25 - —
ton lots. ..... lb. .26 - —
less than ton lots. .... lb. .27 - .28
Sulphate (see Gypsum).
Sulphide, 70% CaS, bgs., c.l., works .. ton. 46.00 - —
80% CaS, bgs., c.l., works .ton. 51.00 - —
luminous, dom., tins, works, 100 lbs. 1.25 - —
Sulphocarbolate, 1,000-lb. lots, 200-lb. bbls. .. lb. .49 - —
Calendula flowers, bls. ..... lb. 2.25 - 2.30
Calomel,[2] bbls., fib. dms., kgs., 50 lbs. or more .. lb. 2.05 - —
Camphor, natural, powd., cs. .. lb. .85 - .90
slabs, cs. ..... lb. .85 - .90
tablets, tins. ..... lb. 1.25 Nom.
synth., dom., tech., bbls., contract, 2,000 lbs. or more, works .. lb. .41 - —
10 bbls. (1,500 lbs.) .. lb. .42½- —
5 to 9 bbls. ..... lb. .44 - —
1 to 4 bbls. ..... lb. .45 - —
25 lbs. to 149 lbs. ..... lb. .47 - —
1 lb. to 24 lbs. ..... lb. .54 - —
USP, gran., powd., bbls., 2,000-lb. lots .. lb. .62 - —
1,000-lb. lots ..... lb. .62 - —
smaller lots. ..... lb. .70 - —
tablets, 2,000-lb. lots .... lb. .51 - —
1,000-lb. lots ..... lb. .52 - —
smaller lots. ..... lb. .58 - —
Monobromate, dms., 100-lb. lots, lb. 3.10 - —
smaller lots, dms. ..... lb. 3.20 - 3.25
Canada balsam (see Fir, balsam).
Canary seed,[1] Argentine, bgs. .lb. No stocks
Canella alba bark, bls. ..... lb. .29 - .30
Cantharides, Chinese, cs. .... lb. 2.25 - 2.30
powd., bxs. ..... lb. 2.40 - 2.50
Russian, cs. ..... lb. 6.00 - 6.25
powd., bxs. ..... lb. 6.25 - 6.50
Capsicum (see Pepper, red).
Caraway seed,[1] Dutch, bgs. .... lb. 1.10 - 1.15
Morocco, dewhiskered, bgs. .lb. .75 - .76
Syrian, dewhiskered, bgs. .... lb. .60 - .61
natural, bgs. ..... lb. .54 - .55
Carbazole, 95%, dms., ton lots, works .. lb. .70 - —
smaller quantities, works .. lb. .80 - —
90%, dms., ton lots, works .. lb. .75 - —
smaller quantities, works .. lb. .85 - —
Carbinol, butyl, norm. (see Amyl alcohol, normal).
Diethyl, l.c.l., works ..... lb. .60 - —
Dimethylethyl, l.c.l., works .lb. .60 - —
Isobutyl, dms., c.l., works .. lb. .225 - —
l.c.l., same basis ..... lb. .235 - —
tanks, same basis ..... lb. .215 - —
Carbon bisulphide, 55-gal. dms., c.l., frt. alld. E. of Miss. R., N. of Ohio R. .. lb. .06 - —
l.c.l., same basis ..... lb. .06¾- —
5-gal. dms., c.l., same basis, lb. .07 - .07½
l.c.l., same basis ..... lb. .08 - .08¾
Dioxide, cyls. ..... lb. .04 - .05
Tetrachloride,[1,3] Zone 1, 52½-gal. dms., c.l., frt. alld., gal. .73 - —
l.c.l., frt. alld. ..... gal. .85 - —
5 or 10-gal. dms., c.l., frt. alld. .. gal. .97 - —
l.c.l., frt. alld. ..... gal. 1.07 - —
Zone 2, 52½-gal. dms., c.l., frt. alld. .. gal. .80 - —
l.c.l., frt. alld. ..... gal. .87 - —
Zone 2, 5 or 10-gal. dms., c.l., frt. alld. .. gal. 1.04 - —
l.c.l., frt. alld. ..... gal. 1.14 - —
Zone 3, 52½-gal. dms., c.l., frt. alld. .. gal .94 - —
l.c.l., frt alld. ..... gal. 1.06 - —
Zone 3, 5 or 10-gal. dms., c.l., frt. alld. .. gal. 1.17 - —
l.c.l., frt alld. ..... gal. 1.27 - —
Zone 4, 52½-gal. dms., c.l., gal. .83 - —
l.c.l. ..... gal. .90 - —
5 or 10-gal. dms., c.l. .. gal. 1.07 - —
l.c.l. ..... gal. 1.17 - —

All prices on carbon tetrachloride are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. cars, L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. All packages are inclusive.

Caustic Soda

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Penn Salt Liquid Caustic Soda is shipped in tank cars specially designed for speedier, safer unloading. These modern 8000-gallon tank cars have a protective lining, are insulated and are equipped with caustic resistant valves and interior fittings. They can be quickly and completely emptied—no wasted caustic, no lost time.

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and not returnable. Zone 1 includes the following States.—Me., N. H., Vt., Mass., Conn., R. I., N. Y. N. J., Pa., Md., Del., Va., W. Va., N. C., Tenn., O., Ind., Mich., Ill., Wis., Minn., Ia., Mo., also the river towns of Burlington, Ia., and Kansas City, Kans. Zone 2 includes N. D., S. D., Neb., Kans., Okla., Ark., La., Miss., Ala., Ga., S. C. and Fla. Zone 3 includes that portion of Montana east of Billings and the States of Wyoming, Colo., N. M., Texas. Zone 4 includes Wash., Idaho, Montana, Ore., Cal., Nev., Utah, Ariz.

Cardamom,[1] bleached, cs.....lb. 1.65 - 1.70
decorticated, cs.....lb. 1.46 - 1.50
green, Alleppey, bgs.....lb. .96 - .98
Ceylon, cs.....lb. .95 - .97
Carmel coloring, bbls.....lb. .70 - 1.10
Carob bean flour (see Gum, Locust bean).
Carvol, bots.....lb. 22.50 -23.00
Cascara sagrada bark, bulk...lb. .26 - .28
Case hardening mixture, 30% lump, dms l.c.l. .09 - —
Casein,[1] dom., processed, acid-precip., bgs., 100 bgs. or more, f.o.b. shipping point, lb. .21 - —
20 to 99 bgs., inclusive, same basis..lb. .21¼- —
less than 20 bgs., same basis..lb. .21¾- —
rennet-precip., bgs., 100 bgs. or more, same basis..lb. .22½- —
20 to 99 bgs., inclusive, same basis..lb. .22¾- —
less than 20 bgs., same basis..lb. .23¼- —
Cassia,[1] Batavia, No. 1, thin quill bls..lb. .60 Nom.
No. 1, regular, bls.....lb. .58 Nom.
Shortstick .....lb. .53 Nom.
broken .....lb. .51 Nom.
China, bls., bgs.....lb. .60 Nom.
rolls, select, bls.....lb. .52 Nom.
broken, bls.....lb. .52 Nom.
Saigon, all medium, bls.....lb. .61 Nom.
all thin, bls.....lb. .62 Nom.
Cassia, fistula, bskts.....lb. .25 - .26
Castoreum, nat., cns.....lb. 12.50 -15.00
Synth., bots.....lb. 19.00 - —
Castor beans, f.o.b. Brazilian ports..long ton. 75.00 - —
Oil (see Oil, castor).
Pomace,[1] dom., guaranteed 5½% ammon., bgs., c.l., wks. ton. 19.00 - —
Catechol, resublimed, frt. alld. E. of Miss., 100-lb. dms..lb. 3.50 -
Celery seed,[1] French, bgs.....lb. 1.02 Nom.
Indian .....lb. .34½- .35½
Celluloid scrap (see Pyroxylin scrap).
Cellulose, acetate, flake, frt. alld. lb. .30 - —
granules, frt. alld.....lb. .35 - —
Triacetate, flake, frt. alld...lb. .30 - —
Cerium hydrate, dms., works..lb. .60 - —
Oxalate, USP, bbls., works..lb. .35 - —
kgs., works.....lb. .37 - —
Oxide, optical grade, 100-lb. lots, works..lb. 1.50 - —
smaller lots, works.....lb. 2.00 - —
Chalk, precipitated, drugs, dentifrices and cosmetics, c.l..lb. .03¾- —
paint and other industries, bgs., c.l., works..ton. 40.00 - —
papermakers, bgs., c.l., works. ton. 32.50 - —
rubbermakers, bgs., c.l., works. ton. 30.00 - —
Chamomile, Hungary type, cs..lb. .60 - .65
Roman, bls.....lb. 3.25 Nom.
Charcoal, softwood, gran., bgs., c.l., clvd., Ala., Del., Ga., Ky., Md., Miss., N. J., N. Y., N. C., S. C., Tenn., Ga., W. Va..ton. 35.40 - —
Conn., Me., Mass., N. H., R. I., Vt..ton. 33.80 - —
Ill., Ind., Iowa, Mich., Minn., Mo., Neb., O. and Wis..ton. 32.50 - —
Penn. .....ton. 34.80 - —
Willow, powd., bbls.....lb. .06 - .07
Chestnut extract,[1,6] clarif., 25% tan., bbls., c.l., works..lb. .02½- —
tanks, works.....lb. .02¼- —
powdered, 65% tan.....lb. .06½ - —
Chillies (see Pepper, red).
China clay, dom., dry-grd., air-float, 99.75%, 200 mesh, bgs., c.l., works..ton. 9.50 - —
l.c.l., works.....ton. 16.00 - —
bulk, c.l., works...ton. 7.00 - —
200 mesh, bgs., c.l., wks. ton. 8.50 - —
l.c.l., works.....ton. 9.50 -15.50
wet grd., silkbolt, 99.9%, 325 bulk, c.l., works...ton. 9.50 - —
paper bgs., c.l., works. ton. 12.50 - —
Import, white, lump, bulk, c.l., ex dock Balto., Boston, Norfolk, Phila..ton. 19.00 -24.00
pewd., cks., l.c.l., ex whse. ton. 41.00 - —
Chloral hydrate, jars, 1,000 lbs..lb. .92 - .95
500 lbs.....lb. .96 - .98
100 lbs.....lb. .98 - 1.00
25 lbs.....lb. 1.00 - 1.02
1-10 lbs.....lb. 1.05 - 1.07
dms., 1,000 lbs.....lb. .90 - .92
500 lbs.....lb. .93 - .95
100 lbs.....lb. .95 - .97
Chlorinated rubber,[6] standard, 100 lbs. or more, works..lb. .32 - —
smaller lots.....lb. .35 - —
Chlorine,[2,6,9] liquid, cyls., c.l., divd., N.Y..lb. .05½- —
contracts, divd. N.Y...lb. .05¼- —
l.c.l., divd. N.Y.....lb. .07¼- —
tanks, single units, works, frt. equald..100 lbs. 1.75 - —
multiple units, 3 or over, works, frt. equald..100 lbs. 2.00 - —
2, works, frt. equalised... 100 lbs. 2.50 - —
1, works, frt. equalised... 100 lbs. 3.00 - —
Chloroform, tech., 650-lb. dms.lb. .20 - —
100-lb. dms.....lb. .22 - —
50-lb. dms.....lb. .23 - —
USP, 650-lb. dms.....lb. .30 - —
100-lb. dms.....lb. .32 - —
50-lb. dms.....lb. .33 - —
Chlorpicrin, com'l, 150-lb. cyls., frt. alld..lb. .80 - —
100-lb. cyls., frt. alld.....lb. .82 - —
25-lb. cyls., ex-whse.....lb. 1.00 - —
1-lb. bots., case 2, ex-whse. lb. 1.25 - —
Chrome acetate, powd., 24%, bbls. lb. .22 - —
solut., 5%, cs., bbls.....lb. .07¼- —
7½%, cs., bbls.....lb. .08¼- —
Cake, bulk, c.l., works.....ton. 16.00 - —
Ore, residue, paper bgs., c.l., works..ton. 15.00 - —
Oxide (see Green, chrome).
Trioxide (see Acid, chromic).
Yellow (see Yellow, chrome).
Chrysarobin, 5-lb. bot.....lb. 6.05 - 6.60
Cinchona bark,[3] quill, USP, 10 in., medium, cs..lb. 1.20 Nom.
broken, quill, red, bgs..lb. .19 Nom.
yellow bgs.....lb. .19 Nom.
Cinchonidine,[3] small, cryst., cns., 100 ozs..oz. .89 + .13½*
Sulphate, NF, cns., 100 ozs..oz. .53 + .13½

* Surcharge to cover present war-risk insurance, higher ocean freight rates and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchonine,[3] small, cryst., cns., 100 ozs..oz. .62 + .13½*
large cryst., cns., 100 ozs..oz. .66 + .13½
Sulphate, NF, cns., 100 ozs..oz. .42 + .13½

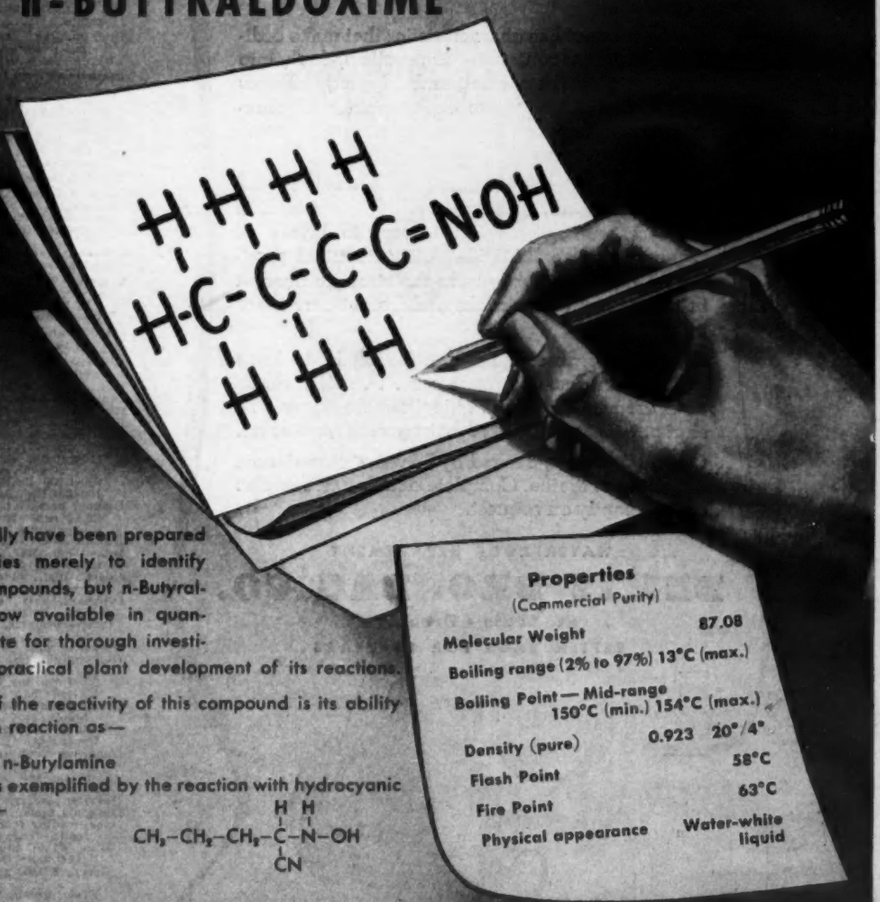
* Surcharge to cover present war-risk insurance, higher ocean freight rates and other expenses over the cost of natural business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchophen, USP, bots.....lb. 3.70 - 3.80
dms., 100 lbs.....lb. 3.50 - —
50 lbs.....lb. 3.55 - —
25 lbs.....lb. 3.60 - —
Heavy density cinchophen 20c. per lb. higher.
Cinnamic alcohol (see Alcohol, cinnamic).
Cinnamon,[1] Ceylon, 2, bls.....lb. .62½ Nom.
chips, bgs.....lb. .56 Nom.
Citral, bots., cns.....lb. 2.85 - 4.75
Citrine ointment,[3] jars.....lb. .96 - 1.20
Citronellal, bots., dms.....lb. 2.75 - 3.25
Citronellol, bots., dms.....lb. 6.00 - 7.00
Clove,[1] Zanzibar.....lb. .20¼- .20¾
Clover tops, red, dom., bgs....lb. .29 - .30
Coaltar, coal-gas, crude, bbls., c.l., works..dm. 8.25 - —
l.c.l., works.....dm. 8.75 - —
tanks, works.....gal. .07¼- —
refd. bbls. c.l. works..bbl. 8.75 - —
l.c.l., works.....bbl. 9.25 - —
tanks, works.....gal. .08½- —
Coaltar, water-gas, crude, dms., c.l., works..bbl. 8.25 - —
l.c.l., works.....bbl. 8.75 - —
refd., dms., c.l., works..dm. 9.25 - —
Cobalt acetate,[6] bbls., kgs., divd., lb. .83¾- —
feed grade, 49.5% Co., 100 lbs., lb. 1.25 - —
Carbonate,[6] powd., bgs., works, lb. 1.58 - —
feed grade, 25% Co., 100 lbs., lb. 1.85 - —
Chloride, kgs., works.....lb. .87½- —
feed grade, 24.5% Co., 100 lbs..lb. 1.25 - —
Cobalt hydrate,[6] bbls.....lb. 2.04 - —
feed grade, 62% Co., 100 lbs., lb. 2.25 - —
Linoleate, paste, 5%, dms....lb. .32 - .35
solid, 8½%, dms.....lb. .44 - —
Nitrate, feed grade, 29.4% Co., 100 lbs. 1.25 - —
Oleate, bbls.....lb. .44 Nom.
Oxide,[6] black, kgs.....lb. 1.84 - —
Phosphate, feed grade, 34% Co., 100 lbs..lb. 1.75 - —
Resinate, fused A, bbls.....lb .15 - —
1%, cobalt oxide, bbls.....lb. .15 - —
2%, cobalt oxide, bbls.....lb. .16 - —
3¼%, cobalt oxide, bbls....lb. .18 - —
precip., dms., divd.....lb. .38½- —
Sulphate,[6] dms.....lb. .05 - —
feed grade, 21% Co.....lb. 1.00 - —
Cobalt salts, feed grade, quotations are f.o.b. Philadelphia, Cleveland, or New York.
Cobalt-Ammonium sulphate, 14% Co..100 lbs. .75 - —
Cocaine, hydrochloride, 100 ozs., cns..oz. 9.75 - —
Cochineal, gray, bgs.....lb. .37 - .38
Teneriffe, silver, bgs.....lb. .38 - .39
Cocoa butter,[1] bulk, f.o.b. shipping point..lb. .25 - —
Cocillana bark, bgs.....lb. .20 - .21
Codeine, cns., 100 ozs.....oz. 11.70 - —
Hydrochloride, cns., 100 ozs..oz. 10.50 - —
Phosphate, cns., 100 ozs.....oz. 9.00 - —
Sulphate, cns., 100 ozs.....oz. 9.50 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls.....lb. .09 - .11
blue, bls.....lb. .09 - .10
Colchicine, bots., cns.....oz. 38.00 -63.00
Colchicum seed, ...lb. No stocks
Collodion, USP, dms., 325 lbs..lb. .19½- .20¼
cns., 30 lbs.....lb. .23 - .29½
flexible, USP, dms., 325 lbs..lb. .21 - .22
cns., 25 lbs.....lb. .25 - .31
Colocynth pulp, bls.....lb. .88 - .89
Colombo root, bls.....lb. .11½- .12
Coltsfoot leaves, bgs.....lb. .90 - 1.00
Condurango bark, bgs.....lb. .14 - .15
Conium leaves, bls.....lb. 1.15 - 1.20
Copaiba, balsam, Para, cns...lb. .47 - .49
S.A., USt, cns.....lb. .50 - .52
Copper acetate,[6] normal, bbls., divd..lb. .24 - —
smaller containers, divd..lb. .26 - .50
Carbonate,[6] 52-54%, bbls....lb. .19½- .20
Chloride,[6] anhyd., bbls.....lb. .23½- .24
regular crystals.....lb. .12 - .14¾
Cyanide,[6] tech., bbls.....lb. .34 - .38
Iodide, bots.....lb. 5.15 - 5.19
Metal,[1,6] electrolytic .....lb. .12 - .12½
Nitrate, tech., cryst., bbls...lb. .15¾- .20
Oleate, precip., bbls.....lb. .22½- .29½
Oxide,[6] black, bbls., works..lb. .19½- .26¾
red, com'l, kgs.....lb. .20 - .22
Resinate, precip., bbls.....lb. .15½- .16
Sulphate,[1,6] 99% cryst., bbls., c.l., f.o.b. works..100 lbs. 5.00 - —
7,200 to 36,000 lbs....100 lbs. 5.15 - —
2,700 to 7,200 lbs.....100 lbs. 5.25 - —
700 to 2,700 lbs.....100 lbs. 5.50 - —
monohydrated, dealers, dms., c.l., works..100 lbs. 8.95 -10.05
bgs in drums.....100 lbs. 9.95 -10.95
Copperas, cryst., gran., bgs., c.l., works..ton. 17.00 - —
bbls., c.l., works.....ton. 20.00 - —
l.c.l., 25 wks.....100 lbs. 1.55 - —
1-4, works .....100 lbs. 2.00 - —
bulk, c.l., works.....ton. 14.00 - —
Copra, Coast, shipment.....lb. No prices.
Coriander seed,[1] Morocco, bgs..lb. .12 Nom.
Indian, bgs.....lb. .11½ Nom.
Corn silk, bls.....lb. .23 - .24
Corn sugar, tanners,[1] chipped, bgs., c.l., divd..100 lbs. 3.62 - —
slabs, bbls., c.l.....100 lbs. 3.54 - —
Syrup, 42°, bbls., c.l....100 lbs. 3.60 - —
43°, bbls., c.l. .....100 lbs. 3.74 - —

National Aniline Division
ALLIED CHEMICAL & DYE CORPORATION

Announces the Availability of

n-BUTYRALDOXIME



Oximes usually have been prepared in laboratories merely to identify carbonyl compounds, but n-Butyraldoxime is now available in quantities adequate for thorough investigation and practical plant development of its reactions.

Illustrative of the reactivity of this compound is its ability to enter such reaction as—

Reduction to n-Butylamine

Addition—as exemplified by the reaction with hydrocyanic acid to form—

Alkylation.

Dehydration to the nitrile, $CH_3-CH_2-CH_2-CN$

Formation of halo-isonitroso compounds.

Suggested Uses: Solvent, Antioxidant, Organic synthesis.

Homologous oximes are available in sample quantities.

Properties
(Commercial Purity)

Molecular Weight	87.08
Boiling range (2% to 97%)	13°C (max.)
Boiling Point — Mid-range	150°C (min.) 154°C (max.)
Density (pure)	0.923 20°/4°
Flash Point	58°C
Fire Point	63°C
Physical appearance	Water-white liquid

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET NEW YORK, N. Y.

BOSTON PHILADELPHIA GREENSBORO CHATTANOOGA
PROVIDENCE SAN FRANCISCO ATLANTA PORTLAND, ORE.
CHICAGO CHARLOTTE NEW ORLEANS TORONTO

Corrosive sublimate,[3] cryst., dms., 50 lbs. or more..lb. 2.89 - —
gran., powd., dms., 50 lbs. or more..lb. 2.24 - —
Cottonroot bark, bls.....lb. .18 - .17
Cottonseed, hull ash,[4] 33-36% pot-ash, bgs., dlvd..unit-ton. 1.00 - —
meal, 8%, southeast mills, May delivery..ton.38.60 - —
Coumarin,[1] cns., makers, primary distrib, 5 lbs. or more..lb. 2.75 - —
smaller lots.....lb. 2.90 - 3.10
Cramp bark, NF, bls.....lb. .60 - .65
Cranesbill root, bls.....lb. .16 - .19
Cream of tartar, USP, gran. or powd., bbls., 5,000 lbs. one ship't..lb. .57½- —
smaller lots, bbls.....lb. .58 - —
kgs.....lb. .58½- —
Creosote, beechwood, chys., dms., lb. .85 - —
bots.....lb. 1.04 - —
hardwood, USP, bots.....lb. .80 - .77
Pine, dms.....gal. .26 - —
Carbonate, bots., chys.....lb. 2.10 - 2.20
Oil, crude, tanks, works...gal. .15½- —
Coaltar, solution, tanks, works, gal. .141 - —
refd., bbls., l.c.l., works.gal. .26 - —
tanks, works.....gal. .15 - .16½
Cresol,[2] special resin grade, dms., c.l., works, frt. equald..lb. .09½- —
l.c.l., same basis.....lb. .10 - —
tanks, same basis.....lb. .08½- —
USP, dms., c.l., works, freight equald..lb. .10½- —
l.c.l., same basis.....lb. .11½- —
tanks, same basis.....lb. .10 - —
Crotonaldehyde, 97% 55 and 110 gals., l.c.l., works..lb. .15 - —
5 and 10-gal. dms., works..lb. .18 - —
Cryolite, syn., c.l., frt. alld. E. of Miss. River..lb. .08½- —
l.c.l., works.....lb. .09¼- —
natural, c.l. .....100 lbs. 9.50 - —
l.c.l. .....100 lbs.10.00 - —

Cube root,[1,2] powd., 5% rotenone, bbls., f.o.b. N.Y.C..lb. .35 - —
4% rotenone prices are 4c. per lb. less.
Cubeb berries, XX, bgs.....lb. .70 - .80
powd., cs.....lb. .80 - .90
Culver's root, bls. .....lb. .27 - .28
Cumin seed, Cyprus, bgs.....lb. .16 - .16½
Indian, bgs.....lb. .15 - .15½
Morocco, bgs.....lb. .16½- .17
Persian, bgs.....lb. .15¾- .15⅞
Cutch, Borneo, extract, solid, contract, f.o.b. N. Y., duty paid..lb. No stocks.
Cyanamid,[1,2] fertilizer mixing grade, guaranteed 21% N, pulv., bgs., Niagara Falls, Ont., contracts.....unit-ton. 1.52½- —
granular, fertilizer mixing grade, 20.6% N, bulk, Niagara Falls, Ont. .....unit-ton. 1.62½- —
Cyanide-chloride, mixture,[2] 45%, gran., dms..lb. .10¾- —
lump, dms. .....lb. .09¾- —
75%, gran., dms. .....lb. .15 - —
Cyclohexane, 98-100%, dms., wks. lb. .16 - —
Cyclohexanol, 98-100%, dms., wks. lb. .23 - —
Cyclohexanone, 98-100%, dms., works..lb. .32 - —
Cyclopropane, USP, cyls., dlvd.. gal. .27 - —

D

Damiana leaves, bls.....lb. .14 - .15
Dandelion root, bls.....lb. .26½- .33
Decanol, normal, tech., 360 lbs., dms., dlvd..lb. .35 - —
Deertongue leaves, bls.....lb. .21 - .22
Degras,[1,2] common, bbls.....lb. .10 - .12
neutral, bbls. .....lb. .27½- .29

Derris root,[1,2] powd., 5% rotenone, bbls., f.o.b. N. Y..lb. .35 - —
4% rotenone prices are 4c. per lb. less.
Dextrin, British gum, c.l., f.o.b. Chicago..100 lbs. 4.25 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.35 - —
corn, canary, bgs., c.l., f.o.b. Chicago..100 lbs. 4.00 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.20 - —
white, bgs., c.l., Chi..100 lbs. 3.95 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.15 - —
potato, dom., bgs., c.l.....lb. .10 - —
l.c.l., bgs.....lb. .10¼- .11¼
Diacetone (see under Alcohol).
Diacetyl, bots.....lb. 9.50 -11.00
Diamyl ether (see Amyl Ether).
Phthalate,[2] dms., c.l., dlvd..lb. .2170- .2200
l.c.l., dlvd.....lb. .2220- .2250
tanks, dlvd.....lb. .2070- .2100
Diamyl sulphate, l.c.l., dms., works..lb. .25 - —
Diamylamine, dms., c.l., wks..lb. .61 - —
l.c.l., works.....lb. .64 - —
Diamylene, dms., c.l., works..lb. .105 - —
l.c.l., works.....lb. .112 - —
tanks, works.....lb. .095 - —
Diamylnaphthalene, dms., l.c.l., works..lb. .17 - —
Diamylphenol, 2:4, dms., c.l., works..lb. .18 - —
l.c.l. .....lb. .21 - —
Diatomaceous earth, dom., natural, bgs., c.l., f.o.b. Pacific Coast...ton.22.00 -25.00
l.c.l., ex whse.....ton.45.00 - —
purified, bgs., c.l., f.o.b. Atlantic seaboard..ton.55.00 -59.00
l.c.l., ex whse.....ton.85.00 -90.00
chemically pure, bgs., c.l., f.o.b. Atlantic seaboard..lb. .07 - —
l.c.l., ex whse.....lb. .10 - .16
import, Algerian, bgs., c.l., c.i.f...ton. No prices
Mexican, white, bgs., c.l., c.i.f., lb. .02 - .03
l.c.l. .....lb. .04 - .06
Dibutyl ether (see Ether, butyl).
Phthalate,[2,3] cns., works.....lb. .23½- —
dms., c.l., dlvd.....lb. .2000- .2070
l.c.l., dlvd.....lb. .2050- .2120
tanks, dlvd.....lb. .1900- .1970
Sebacate, dms., works.....lb. .45 - .47
Tartrate, dom., dms.....lb. .92 - 1.02
Dibutylamine, dms., c.l., works, lb. .61 - —
Dicalcium phosphate (see Calcium phosphate dibasic).
Dichloroethyl ether,[2] dms., c.l., works..lb. .15 - —
l.c.l. .....lb. .16 - —
tanks .....lb. .14 - —
Diethylaniline, dms.....lb. .40 - —
Diethyl carbonate, com'l, dms..lb. .25 - —
refd., 99%, dms.....lb. .30 - —
Oxalate, dms., c.l., dlvd.....lb. .2020- —
l.c.l., dlvd.....lb. .2070- —
Phthalate,[2] dms., c.l., dlvd..lb. .2120- .2170
l.c.l. .....lb. .2170- .2220
tanks .....lb. .2020- .2250
Sulphate, dms., c.l., works..lb. .15 - —
l.c.l., works.....lb. .14 - —
tanks .....lb. .12 - —
Diethylamine ethanol,[2] l.c.l., dms., works, frt. alld. E. of Miss. River..lb. .75 - —
Diethyleneglycol,[2] dms., c.l., wks., lb. .14 - —
l.c.l., works.....lb. .15½- —
Monobutylether, dms., works..lb. .22½- .24½
Diethyleneglycol monoethylether, dms., c.l., works..lb. .14½- —
l.c.l., works.....lb. .15½- —
tanks, works.....lb. .13½- —
Digitalis leaves, dms.....lb. .45 - .46
Digiycol laurate, dms.....lb. .31 - .33
Oleate, light, bbls., c.l.....lb. .17 - —
Stearate, bbls., c.l.....lb. .22 - —
Di-isobutyl ketone, dms., works, lb. .19 - —
Dillseed, cleaned, bgs.....lb. .0985- .1010
dewhiskered, bgs.....lb. .11¼- .11¾
Dimethyl phthalate,[2] dms., c.l., dlvd..lb. .1970- .2000
l.c.l., dlvd.....lb. .2020- .2050
tanks, dlvd.....lb. .19 - —
Dimethylamine, dms., c.l., dlvd..lb. .85 - —
l.c.l., dlvd.....lb. .90 - —
Dimethylaniline, dms., c.l.....lb. .28 - —
l.c.l., dms.....lb. .34 - —
Dinitrobenzene, bbls., 80° min..lb. .18 - —
Dinitrochlorobenzene, dms.....lb. .14 - —
Dinitronaphthalene, bgs.....lb. .35 - .38
Dinitrophenol, bbls.....lb. .22 - —
Dinitrotoluene, dms.....lb. .18 - —
oily, dms.....lb. .06 - —
Diorthotoluolguanidin,[2] dms., 2,000 lbs. or over, dlvd..lb. .44 - —
600-1,950 lbs., dlvd.....lb. .46 - —
150-450 lbs., dlvd.....lb. .47 - —
Dioxan, dms., c.l., frt. alld.....lb. .20 - —
l.c.l., same basis.....lb. .21 - —
tanks, same basis.....lb. .19 - —
Dip oil (see Tar acid oil).
Dipentene, dms.....gal. .59 - .61
tanks .....gal. .51 - —
dest., dist., dms.....gal. .55 - .58
tanks .....gal. .45 - —
Diphenyl, bbls., c.l., works...lb. .15 - —
l.c.l., works.....lb. .16 - .20
Oxide, perfume grade, dms..lb. .43 - .45
cns. .....lb. .48 - .50
Diphenylamine,[2] bbls.....lb. .25 - —
Diphenylguanidin,[2] dms., 2,000 lbs. or over, dlvd..lb. .35 - —
600-1,950 lbs., dlvd.....lb. .36 - —
150-450 lbs., dlvd.....lb. .37 - —
Dimethylethyl carbinol (see Carbinol).
Divi-Divi,[2] Colombian.....ton.80.00 - —
Venezuelan .....ton.80.00 - —
Doggrass root, imp., cut, NF, bls..lb. .50 - 1.50
domestic, bls. .....lb. .36 - .45
Dogwood bark, Jamaica, bls...lb. .07 - .09
Dover's powder, USP, cns.....lb. 2.75 - 2.80
Dragon's blood, reds, cs.....lb. .96 - 1.00
Dyes, coaltar (certified colors) for foods, drugs and cosmetics:—
Blue, FD&C blue, No. 1, cns.lb.13.50 - —
FD&C blue, No. 2, cns.....lb.13.50 - —
Green, FD&C green, No. 2, cns, lb.17.50 - —
FD&C green, No. 3, cns.....lb.27.50 - —
FD&C blue, No. 2, cns.....lb.13.50 - —
Orange, FD&C orange, No. 1, cns..lb. 2.90 - —
FD&C orange, No. 2, cns..lb. 3.65 - —
Dyes, coaltar (certified colors) for foods, drugs and cosmetics:—
Red, FD&C red, No. 1, cns..lb. 6.00 - —
FD&C red, No. 2, cns.....lb. 3.15 - —
FD&C red, No. 3, cns.....lb.17.50 - —
FD&C red, No. 4, cns.....lb. 5.75 - —
FD&C red, No. 32, cns.....lb. 4.15 - —
Yellow, FD&C yellow, No. 1, cns..lb. 3.50 - —
FD&C yellow, No. 3, cns..lb. 2.65 - —
FD&C yellow, No. 4, cns..lb. 2.65 - —
FD&C yellow, No. 5, cns..lb. 3.15 - —
FD&C yellow, No. 6, cns..lb. 3.15 - —
Dyes, coaltar (certified colors). for drugs and cosmetics:—
Black, D&C black, No. 1....lb. 8.35 - —
Blue, D&C blue, No. 6.....lb.13.50 - —
Brown, D&C brown, No. 1, cns, lb.12.35 - —
Green, D&C green, No. 5, cns. lb.12.35 - —
D&C green, No. 6, cns..lb.12.35 - —
Orange, D&C orange, No. 5, cns..lb. 8.35 - —
D&C orange, No. 4, cns....lb.15.35 - —
D&C orange, No. 10, cns...lb.18.85 - —
D&C orange, No. 12, cns...lb.17.35 - —

Dyes, coaltar (certified colors), for drugs and cosmetics:—
Red, D&C red, No. 8.....lb. 6.00 - —
D&C red, No. 17.....lb. 8.35 - —
D&C red, No. 18.....lb.18.35 - —
D&C red, No. 19, cns.....lb.15.35 - —
D&C red, No. 22, cns.....lb. 8.35 - —
D&C red, No. 33, cns.....lb.12.35 - —
D&C red, No. 37, cns....lb.12.35 - —
Yellow, D&C yellow, No. 7, cns..lb. 8.35 - —
D&C yellow, No. 8, cns....lb. 8.35 - —
D&C yellow, No. 11.....lb.10.35 - —
Dyes, coaltar (certified colors), for external use drugs and cosmetics:—
Blue, Ext. D&C blue, No. 1, cns..lb.12.35 - —
Green, Ext. D&C green, No. 1, cns..lb.12.35 - —
Red, Ext. D&C red, No. 1, cns..lb.10.35 - —
Ext. D&C red, No. 3.....lb.21.85 - —
Ext. D&C red, No. 5.....lb. 7.35 - —
Ext. D&C red, No. 10, cns.lb.12.35 - —
Ext. D&C red, No. 13, cns.lb.12.35 - —
Yellow, Ext. D&C yellow, No. 1, cns..lb. 8.35 - —
Dyes, coaltar, for general uses (numbers are those of Colour Index Scale):—
36 Chrome yellow 2G....lb. .65 - .70
40 Chrome yellow R....lb. .50 - 1.00
53 Victoria violet.....lb. .80 - 1.00
165 Lake red C.....lb. .70 - .80
170 Fast red A[6].....lb. .56 - .60
180 Fast red VR.....lb. 1.50 - 1.60
189 Lake red R, paste....lb. .85 - .90
189 Lake red R, powd....lb. 2.00 - 2.10
Sulphur tan .....lb. .90 - .95
202 Chrome blue black U.lb. .35 - .42
204 Chrome black A.....lb. .42 - .45
206 Fast red blue R.....lb. .75 - 2.00
216 Chrome red B.....lb. 1.75 - 2.00
262 Cloth red 2B.....lb. .80 - .85
289 Fast cyanin 5R.....lb. .80 - 1.00
299 Chrome black F.....lb. .85 - .90
307 Fast cyanin black B..lb. .80 - .85
326 Direct cast scarlet....lb. 2.00 - 2.25
804 Paper yellow .....lb. .85 - .90
805 Chrysophenin G.....lb. .68 - .70
852 Direct scarlet B.....lb. 1.15 - 1.20
894 Direct violet N.....lb. .80 - .85
887 Direct violet B....lb.1.00 - 1.80
401 Developed black BHN, lb. .45 - .60
406 Direct blue 2B.....lb. .66 - .70
415 Direct orange B.....lb. .60 - .70
419 Direct fast red F....lb. .70 - .72
420 Direct brown M.....lb. .65 - .67
448 Benzo purpurin 4B...lb. .66 - .67
495 Benzo purpurin 10B..lb. .40 - .50
502 Direct ascrin G.....lb. .75 - .80
512 Direct blue RD.....lb. .90 - 1.00
515 Direct pure blue 6B..lb. 1.20 - 1.30
520 Direct pure blue....lb. .50 - 1.00
529 Direct fast black PF.lb. .55 - 1.00
581 Direct black EW....lb. .50 - .54
582 Direct black RX....lb. .55 - .45
592 Direct green B.....lb. .50 - .58
594 Direct green G.....lb. .50 - .55
596 Direct brown 3GO....lb. .68 - 1.00
620 Direct yellow R.....lb. 1.25 - 1.50
696 Acid violet .....lb. 1.00 - 3.00
812 Primulin .....lb. .70 - .72
814 Direct fast yellow....lb. 2.00 - 2.25
845 Nigrosin (water soluble), lb. .35 - .50
1177 Indigo, 20% paste....lb. .15 - .16
Benzo fast black L...lb. .90 - 1.00
Sulphur black .....lb. .20 - .25
Sulphur blue .....lb. .45 - 1.00
Sulphur brown .....lb. .25 - .50
Sulphur maroon.....lb. .40 - —
Sulphur olive.....lb. .25 - .54
Sulphur yellow.....lb. .30 - .50
Zambesi black.....lb. .75 - .80
Black:—
800 Nigrosin derivatives..lb. .38 - .44
Blue:—
1075 Alizarin astral base..lb.15.00 - —
1078 Alizarin cyanin green base..lb. 6.00 - —
Brown:—
Brown .....lb. 1.15 - —
Green:—
1078 Alizarin cyanin green.lb. 5.00 - —
Green .....lb. .75 - —
Orange:—
24 Sudan I.....lb. .75 - —
Red shade.....lb. .75 - —
Red:—
75 Sudan II.....lb. 1.05 - —
258 Sudan IV.....lb. .95 - —
749 Rhodamine B (oil pink), lb. 2.50 - —
1080 Anthraquinone,[2] violet base..lb. 6.00 - —
680 Oil violet.....lb. .50 - —
Yellow:—
15 Amidoazobenzene yellow..lb. .90 - —
17 Amidoazotoluene yellow, lb. .75 - —
61 Yellow OB.....lb. 1.40 - 2.00
Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each: lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse)
Black:—
246 Naphthol blue black S.lb. .50 - —
573 Methylene gray.....lb. 1.50 - —
729 Victoria blue B.....lb. 1.85 - —
861 Indulin .....lb. .87 - —
909 New blue F.....lb. 1.30 - —
922 Methylene blue.....lb. 1.00 - —
1054 Alizarin saphirol B..lb. 1.90 - —
1180 Indigotin IA.....lb. .85 - —
Blue:—
714 Patent blue A.....lb. 1.05 - 1.10
Brown:—
234 Resorcin brown Y....lb. .65 - —
235 Resorcin dark brown R, lb. .66 - —
331 Bismarck brown G...lb. .47 - .62
332 Bismarck brown R...lb. .47 - .62
795 Phosphin .....lb. 4.65 - —
Green:—
5 Naphthol green B....lb. 1.00 - —
657 Malachite green.....lb. 1.35 - —
662 Brilliant green.....lb. 2.00 - —
666 Guinea green B.....lb. 1.15 - —
737 Wool green S.....lb. .58 - —
924 Methylene green B...lb. 1.55 - —
1078 Alizarin cyanin green.lb. 2.00 - —
Orange:—
10 Chrysoidin G.....lb. .44 - —
21 Chrysoidin R.....lb. .41 - —
27 Orange G.....lb. .50 - —
151 Orange Y.....lb. .31 - .33
161 Orange R.....lb. .34 - —
31 Amidonaphthol red G.lb. .42 - —
37 Amidonaphthol red 6B, lb. .63 - —
Red:—
79 Popceau R.....lb. .48 - —
88 Fast red B.....lb. 1.05 - —
176 Fast red A[6].....lb. .54 - —
179 Azorubin .....lb. .60 - —
183 Crosein scarlet 3BX..lb. .72 - .75
185 Cochineal red A.....lb. .60 - —
252 Brilliant crosein M...lb. .68 - —
677 Fuchsin .....lb. 2.10 - —
749 Rhodamine B.....lb. 3.50 - —
752 Rhodamine 6B.....lb. 4.50 - —
768 Eosin G.....lb. 1.50 - —
841 Safranin .....lb. 1.45 - —
Violet:—
680 Methyl violet B.....lb. .75 - —
681 Crystal violet C.....lb. 1.75 - —
695 Acid violet 4BN.....lb. .88 - —

O'COURSE
we custom tailor
Bemis WATERPROOF Bags

If your product has characteristics that make ordinary shipping containers impractical, look into the possibilities of packing and shipping in Bemis Waterproof Bags. These *economical* and *practical* containers are serving for scores of hard-to-pack products.

Extra-strong Bemis Waterproof Bags have an outside of tough, closely woven fabric which is *bonded,* with special adhesives, to layers of paper in any combination *your* individual product requires. And they have the strength needed in these days when trucks and freight cars carry capacity loads.

Bemis Waterproof Bags can be made to keep moisture in and dampness out . . . retain desirable aromas and repel objectionable odors . . . shut out dust and dirt . . . resist greases and acids.

Our laboratories, backed by 85 years' experience, are at your service. Complete details and samples sent promptly on request.

WATERPROOF DEPARTMENT

BEMIS BRO. BAG CO.

St. Louis • Brooklyn

BETTER BAGS FOR 85 YEARS

Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse)

Yellow:—
10 Naphthol yellow S....lb. .88 - —
138 Metanil yellow....lb. .56 - .58
696 Fast light yellow....lb. 1.25 - —
639 Xylene light yellow....lb. 1.15 - —
640 Tartrazin....lb. .80 - —
655 Auramine....lb. 1.27 - —

Dyes, coaltar, for stains, water-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).

Black:—
864 Nigrosin....lb. .38 - .44

Blue:—
860 Indulin....lb. .60 - .70

Brown:—
321 Bismarck brown....lb. 1.50 - —

Green:—
637 Malachite green base..lb. 2.00 - —

Orange:—
20 Chrysoidin G....lb. .95 - —
21 Chrysoidin R....lb. .96 - —

Red:—
677 Fuchsin, magenta, base, lb. 7.25 - —
749 Rhodamine B....lb. 4.75 - —

Yellow:—
67 Amidoacetotoluene yellow, lb. .75 - —
655 Auramine....lb. 2.60 - —
800 Chinolin yellow SS...lb. 2.00 - —

Violet:—
680 Methyl violet base....lb. .85 - —

Dyes, natural (see name of article).

E

Echinacea root, bls....lb. .23 - .26
Egg albumen (see Albumen).
yolk, dried, dom., bbls....lb. 1.00 - 1.10
imported....lb. 1.00 - 1.10
Alder flowers, bright, bls....lb. .59 - .60
Elecampane root, bls....lb. .18 - .19
Elm bark, grinding, bls....lb. .14 - .15
powd., bbls., bxs....lb. .20 - .21
select, bndls....lb. .18 - .19
Emetine hydrochloride, bots...oz. 21.00 -33.00
Ephedra, bls....lb. .21 - .22
Ephedrine, natural, USP, anhydrous, bots...oz. 1.15 - 1.68
Hydrochloride or sulphate, tins...oz. .95 - 1.45
synth, USP, hemihydrate, bots., 100 ozs. or more...oz. .65 - —
anhyd., bots., 100 ozs. or more...oz. .65 - —
Hydrochloride, tins, 100 ozs. or more...oz. .80 - —
Sulphate, cryst., tins, 100 ozs. or more...oz. .48 - —
Epsom salt, tech., bgs....100 lbs. 1.80 - —
bbls....100 lbs. 1.90 - —
Epsom salt prices on technical and USP are on the basis of freight equalized with Balto., Carteret, N. J., Chicago, Cincinnati, Cleveland, Houston, New Orleans, New York.
USP, cryst., bgs., c.l....100 lbs. 2.00 - —
100 lbs. 2.00 - —
l.c.l., 5,000 lbs., 1 withdrawal....100 lbs. 2.25 - —
smaller lots....100 lbs. 2.50 - —
bbls., c.l....100 lbs. 2.10 - —
bbls., l.c.l., 5,000 lbs., 1 withdrawal...100 lbs. 2.35 - —
smaller lots....100 lbs. 2.60 - —
kgs., c.l....100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal...100 lbs. 2.60 - —
smaller lots....100 lbs. 2.85 - —
dried, bgs., l.c....lb. .08 - .09
Ergot, USP, dms., ton lots....lb. 1.10 - 1.45
smaller lots....lb. 1.15 - 1.40
Eserine, bots....oz. No prices.
Sulphate, 1-gram vials....vial. 2.10 - —
Ether, acetic (see Ethyl acetate).
Amyl (see Amyl, ether).
Butyl, l.c.l., dms., dlvd....lb. .30 - —
Ether, ethyl (see Ether, sulphuric).
Nitrous, conc., bot., 100 lbs., lb. .96 - 1.10
Sulphuric, conc., 310-lb. dm., lb. .11 - —
27-lb. dms....lb. .15½ - .16
Ether, USP, anaesthesia, hospitala, 1-lb. cns..lb. .60 - .61
Synth., dms., c.l., works....lb. .14½ - —
l.c.l., works....lb. .15½ - —
tanks....lb. .12½ - —
Ethyl acetate,[4] 85-90%, dms., c.l., frt. alld..lb. .1170- .1200
l.c.l., frt. alld....lb. .1220- .1250
tanks, frt. alld....lb. .1070- .1100
98-99%, dms., c.l., frt. alld..lb. .12¼- .13¼
l.c.l., frt. alld....lb. .12¾- .13¾
tanks, frt. alld....lb. .11¼- .12¼
NF, 190-lb. dms....lb. .14½- .15½
Acetoacetate, dms., c.l., wks.lb. .37½- —
l.c.l., frt. alld....lb. .38 - —
Benzoate, bots....lb. .90 - 1.00
Bromide, tech., dms....lb. .50 - .55
Caproate, cns....lb. 1.30 - 1.40
Chloride, dms....lb. .18 - .20
Cinnamate, cns....lb. 3.50 - 3.85
Formate, cns., drs....lb. .27½- .30
Iodide, bots....lb. 3.50 - 3.60
Lactate, 55-gal. dms., works.lb. .33½- —
5-gal. dms., works....lb. .37½- .39½
Myristate, dms., works....lb. .55 - —
Oleate, dms., works....lb. .47 - —
Oenanthate, dms....lb. .75 - 1.25
Oxalate, dms., frt. alld....lb. .32 - —
Oxyhydrate, bots....gal. 7.50 - 8.00
Silicate, l.c.l., dms., works..lb. .77 - —
Vanillin,[4] cns., makers, primary distrib., 5 lbs. or more...lb. 6.04 - 6.21
smaller lots....lb. 7.02 - 7.23
Ethylcellulose,[4] sta., pkgs., 5,000 lbs. or more, works..lb. .50 - —
smaller lots, same basis....lb. .52 - .60
Ethyldiethanolamine, l.c.l., dms., works..lb. .80 - —
Ethylethanolamine, dms., c.l., works..lb. .57 - —
l.c.l., works....lb. .60 - —
Ethylene, dichloride,[3] dms., c.l., works, E. of Rockies, frt. alld..lb. .0842- —
West of Rockies, same basis..lb. .0891- —
l.c.l., works, E. of Rockies, frt. alld..lb. .0891- —
West of Rockies, same basis..lb. .0941- —
tanks, same basis, E. of Rockies..lb. .0743- —
W. of Rockies....lb. .0792- —
Ethyleneglycol[3] dms., c.l....lb. .15½- —
l.c.l....lb. .16½- —
tanks....lb. .14½- —
Monobutylether, dms., c.l., wks. lb. .16½- —
l.c.l., works....lb. .17½- .20½
tanks, works....lb. .15½- —

F

Feldspar, enamel, 100 mesh, bulk, works..ton. 14.00 -17.50
l.c.l., minimum 2 tons...ton. 17.00 -20.50
glass, 20 mesh, bulk, works.ton. 9.75 -12.25
l.c.l., minimum 2 tons...ton. 12.75 -16.25
pottery, bulk, Me., works...ton. 17.00 -19.00
N.C., works....ton. 17.00 -19.00
l.c.l., min. 2 tons..ton. 20.00 -22.00
Fennel seed, Indian, bgs....lb. .0985- .1020
Fenugreek seed, bgs....lb. .09 - .09½
Ferric, sulphate, anhyd., c.l., works..ton. 35.00 - —
l.c.l....ton. 40.00 - —
Film scrap, colored, cs., 50 lbs. or over, works..lb. .13½- .14
smaller lots, works....lb. .15 - —
water white,[5] cs., 50 lbs. or over, works..lb. .14½- .15
smaller lots, works....lb. .17 - —
Fir, balsam, Canada, cns....gal. 19.00 -20.00
Oregon, bbls....gal. 1.85 - 2.25
Fish berries, bgs....lb. .24 - .26
Fish[1] meal, grd., 60% protein, bgs., East Coast fish factories..ton. 72.50 - —
65% protein, same basis..ton. 78.50 - —
Fish scrap, menhaden, new catch, dried, 60% protein, bulk, East Coast fish factories.ton. 66.50 - —
meal, scrap, acid, 6-7% ammon., 8% a.p.a., bulk, Carolina and Florida fish factories..unit-ton. No prices
Long Island fish factories, unit-ton. No prices
Flake white, dom., bbls....lb. .69 - —
kegs....lb. .11 - —
Flaxseed, French, black, bgs..lb. .65 - .70
Indian, blonde, bgs....lb. .12¼- .13
Fluorspar, dom.,[1] No. 1 ground, 96-98%, bulk, c.l., f.o.b. mines..net ton. 33.00 - —
bgs., c.l., f.o.b. mines.ton. 36.20 - —
washed gravel, 85.5%, f.o.b. Ky. and Ill.-Ky. mines..net-ton. 25.00 -28.00
No. 2 lump or washed gravel, 83.5%, c.l., f.o.b. Ky. and Ill. mines, or barge delivery, Ohio River landings....ton. 25.00 -28.00
Formaldehyde,[1,6] bbls., c.l., works..lb. .0550- .0575
l.c.l., works....lb. .06 - .0625
dms., c.l., works....lb. .0615- .0640
l.c.l., works....lb. .0665- .0690
Formaldehyde, tanks....lb. .04 - .04½
[6] Formaldehyde prices are under 4¼c. to 5½c. OPA ceiling.
Fringetree bark, bls....lb. .50 - .40
Fuller's earth, dom., powdered, bgs., c.l., f.o.b. Fla., Ga., mines..ton. 8.50 -15.00
f.o.b. Tex. mines....ton. 12.50 - —
imp., c.l., bgs....ton. 30.00 -40.00
Fumitory herb, bls....lb. .56 - .60
Furfural,[3] ref., dms., c.l., works, lb. .15 - —
l.c.l., works....lb. .17½- .25
tech., dms., contracts, 150,000 lbs..lb. .10 - —
dms., c.l., works....lb. .12½- —
l.c.l., works....lb. .15 - .20
tanks, works....lb. .09 - —
Fusel oil, crude, dms., wks...gal. .75 - —
refd., dms., incl., dlvd....lb. .18½- .19½
Fustic, cryst., bbls., No. 1....lb. .32 - —
No. 2....lb. .30 - —
No. 3....lb. .28 - —
extract, bbls., No. 1....lb. .16 - —
No. 2....lb. .15 - —
No. 3....lb. .12½- —

G

G salt, bbls....lb. .45 - —
Galangal root, bls....lb. .28 - .30
Gambier, common, cases....lb. No prices.
plantation, cases....lb. No prices.
cubes, Singapore, cases...lb. .30 Nom.
extract, bbls....lb. .09½- .12
Gasoline[1] at refinery:—
Arkansas, US motor, 72-74 octane, leaded, tanks, car lots, ex tax..gal. .06 - —
Bayonne, 70-octane, unleaded, tanks, ex tax..gal. .092 - —
72-74 octane, ex tax....gal. .092 - —
California 78 octane at refineries, tanks..gal. .073 -
Gasoline, at refinery, Gulf Coast, US motor, 72-74 octane, tanks, ex tax....gal. .05⅝- —
80 octane, tanks....gal. .06⅜- —
Group 3, 72-74 octane, tanks, gal. .06⅜- .06
80 octane, tanks....gal. .06⅛- .07
Oklahoma-Texas, US motor, 72-74 octane, tanks, ex tax, gal. .05½- .06
natural, 26-70, Group 3, tanks..gal. .06⅞- —
Gelatin, silver, cs....lb. .90 - .97
Gelsemium root, bls....lb. .15 - .19
Gentian root, bls....lb. .43 - .45
grd., bbls., bxs....lb. .48 - .50
powd., bbls., bxs....lb. .49 - .51
Geraniol, 92-96%, cns., dms....lb. 3.50 - 4.50
Ginger,[1] African, No. 1, bls....lb. .28 - .29
Calicut, bgs....lb. .25 - .26
Cochin, bleached, bgs....lb. .25¾- .26¼
unbleached, bgs....lb. .25 - .26
Jamaica, No. 1, bgs....lb. .38 - .39
No. 2, bgs....lb. .28 - .29
No. 3, bgs....lb. .26 - .27
Ginseng root, wild South, cs..lb. 12.00 -13.00
Glauber's salt, anhyd. (see Soda Sulphate).
cryst., dom., bgs., bbls., c.l., works..100 lbs. 1.05 - 1.25
5 tons or over, works..100 lbs. 1.15 - 1.35
less than 5 tons, works..100 lbs. 1.25 - 1.45
Glue, bone, calcimine type, 24 millipoise, 26 jelly-grams, bgs., c.l., East of Midwest...lb. .16 - —
l.c.l....lb. .17 - —
30/35, bgs., c.l....lb. .15½- —
l.c.l....lb. .16½- —
38/32, bgs., c.l....lb. .17 - —
l.c.l....lb. .18 - —

A New PROTECTIVE INTERIOR COATING for Lined Steel Containers

PERFECTED in our laboratory, this new interior lining material provides the nearest approach to a universal lining so far developed. Exhaustive tests for military use proves its remarkable ability to withstand denting and crushing blows without any *indication* of flaking, chipping or cracking. Temperature tests at 67° *below zero* prove that this new lining remains flexible without cracking.

The wide range of chemicals, foods and petroleum products, including high test aviation gasoline, that can be packed with positive protection with this new interior coating makes it an *outstanding development* in steel container lining material.

Capacities to 55 Gallons

Some products tested for packing in steel containers with this new protective interior coating.

Chloride of Lime, High Octane Aviation Gasoline. Many organic solvents such as Toluol, Xylol, Ethyl Acetate, Butyl Acetate, Butyl Alcohol, Cellusolve.

Hammer test shows no flaking or chipping even though metal is bent and crushed.

At 67° below zero, bending and twisting of metal coated with IC62 shows no cracking of this remarkable new lining material.

Steel strip coated with IC62 protective lining heated in boiling high octane leaded aviation gasoline for 168 hours continuously without any effect on lining.

INLAND STEEL CONTAINER CO.

Formerly WILSON & BENNETT MANUFACTURING COMPANY

6532 S. MENARD AVE. CHICAGO, ILLINOIS

Plants at Chicago—Jersey City— New Orleans—Richmond, Calif.

Sales offices in all principal cities

CONTAINER SPECIALISTS

Glue, bone, 82/108, c.l. .....lb. .18½- —
l.c.l. .....lb. .19 - —
hide,[1] 100-121 (jelly test in grams, bgs., c.l., dlvd....lb. .14 - —
bbls., c.l., dlvd.....lb. .14½- —
122-149, bgs., c.l., dlvd....lb. .15 - —
bbls., c.l., dlvd.....lb. .15½- —
150-177, bgs., c.l., dlvd....lb. .16 - —
bbls., c.l., dlvd.....lb. .16½- —
178-206, bgs., c.l., dlvd....lb. .17 - —
207-236, bgs., c.l., dlvd....lb. .18 - —
237-266, bgs., c.l., dlvd....lb. .19 - —
bbls., c.l., dlvd.....lb. .19½- —
267-295, bgs., c.l., dlvd....lb. .20 - —
bbls., c.l., dlvd.....lb. .20½- —
299-330, bgs., c.l., dlvd....lb. .21 - —
bbls., c.l., dlvd.....lb. .21½- —
331-362, bgs., c.l., dlvd....lb. .22 - —
bbls., c.l., dlvd.....lb. .22½- —
363-394, bgs., c.l., dlvd....lb. .23 - —
bbls., c.l., dlvd.....lb. .23½- —
395-427, bgs., c.l., dlvd....lb. .24 - —
bbls., c.l., dlvd.....lb. .24½- —
428-460, bgs., c.l., dlvd....lb. .25 - —
bbls., c.l., dlvd.....lb. .25½- —
461-494, bgs., c.l., dlvd....lb. .26 - —
bbls., c.l., dlvd.....lb. .26½- —
495-529, bgs., c.l., dlvd.....lb. .27 - —
bbls., c.l., dlvd.....lb. .27½- —

Hide glue transportation charges in excess of 75c. per hundredweight may be added. Prices are those established for sale by producers; prices for glue sold by jobbers are 2c. to 3½c. per pound higher according to grade. Less car lot prices are 1c. per pound higher than car lot. Maximum prices for chrome glue and coney glue in carload lots, wherein the jelly test in grams is 267 or higher, are 2c. per pound higher than the prices established above, while those for these glues, wherein the jelly test is below 267, are 1c. per pound higher than the above prices.

Glycerin,[1,*] **Zones A and C, C.P.,*** (S.P., 96%), drums, car lots, dlvd...lb. .18¾- —
less car lots, dlvd...lb. .19¼- —
tanks, dlvd.....lb. .18⅜- —

Glycerin, C.P.* (USP 95%), drums, car lots, dlvd..lb. .18¼- —
less car lots, dlvd..lb. .18¾- —
tanks, dlvd. .....lb. .18 - —
dynamite,* high gravity, yellow, distilled, dms., car lots, dlvd..lb. .18¼- —
less car lots, dlvd...lb. .18¾- —
tanks, dlvd. .....lb. .18 - —
saponification, 88%, to refiners, dms., c.l., dlvd..lb. .12¾- —
less car lots, dlvd..lb. .12¼- —
tanks, dlvd. .....lb. .12¾- —
to individual users, dms., c.l., f.o.b. point of manufacture. lb. .13¾- —
less car lots, same basis, lb. .14¾- —
tanks, same basis....lb. .12¾- —
soaplye, 80%, dms., car lots, dlvd..lb. .11¼- —
less car lots, dlvd..lb. .11½- —
tanks, dlvd. .....lb. .11½- —

Glycerin prices in Zone B are 2c. higher.

Zone A means all points east of and including N. Dak., S. Dak., Neb., Kansas, Omaha, Texas, Laramie County, Wyo.; Col.; east of but not including the following counties:—Jackson, Grand, Gilpin, Jefferson, Douglass, Teller, Fremont, Custer, Huerfano, and Costilla.

Zone B means the territory between Zones A and C, as follows:—Washington, east of and including the following counties:—Okanogan, Chelan, Kittitas, Yakima, Klickat; Ore., east of and including the following counties:—Hood River, Wasco, Jefferson, Deschutes, Klamath; Nev., Ariz., New Mex., that part of Col. west of and including those counties mentioned above; Utah, Wyo., excepting Laramie County; Idaho and Mont.

Zone C means the territory west of Zone B.

*Note.—Sales of glycerin to U. S. government are at prices 1c. below the above prices on C.P., and dynamite glycerin.

Glycine, medicinal, bbls., tins..lb. 1.70 - 2.00

Glycol boriborate, dms.....lb. .22 - —
Phthalate, dms. .....lb. .36 - —
Stearate, dms. .....lb. .26 - —
Gold of pleasure seed, bgs....lb. No stocks.
Chloride, acid, brown, bots.oz. 20.75 -21.00
yellow, bots. .....lb. 18.75 -19.00
Gold-soda chloride, photo., bots., oz. 13.00 - —
USP IX, bots.....oz. 14.50 -14.75
Goldenseal root, bls.....lb. 4.85 - 5.00
powd., bxs.....lb. 5.20 - 5.25
Grains of Paradise, bgs.....lb. .20½- .21
Graphite,[1,*] flake (cryst.), 90%, 325 mesh, 50% graphite, carbon, bgs., c.l., works..lb. .07 - —
bbls., c.l., works.....lb. .07¼- —
l.c.l., works.....lb. .07½- —
80% passable through 50-mesh screen, 65-69% carbon, bgs., works or whse..lb. .04½- —
70-74% carbon, same basis, lb. .05 - —
75-79%, same basis.....lb. .05½- —
80-84%, same basis.....lb. .06 - —
85-89%, same basis.....lb. .07 - —
90% and up, same basis...lb. .08 - —
Grease,[1,2] **house, loose**.....lb. .09¼- —
white, choice loose.....lb. .08¾- —

Wool (see Adeps lanae and Degras).

Green, brilliant,[1] thioflavin toner, tungstic, kgs., works, lb. 3.75 - —
molybdic, same basis...lb. 3.25 - —
Chrome,[1] CP, dark, light, medium blue content up to 5%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. .23 - —
6-10% bbls., same basis.lb. .24 - —
11-15%, bbls., same basis.lb. .25 - —
16-20%, bbls., same basis.lb. .25½- —
21-25%, bbls., same basis.lb. .26 - —
26-30%, bbls., same basis.lb. .26½- —
31-35%, bbls., same basis.lb. .27½- —
36-40%, bbls., same basis.lb. .29 - —

Green, chrome, CP, dark, light, medium, color content 41-45%, bbls., same basis..lb. .30½- —
46-50%, bbls., same basis.lb. .33 - —
reduced color, 5%, same basis, lb. .06¾- —
9-10%, bbls., same basis.lb. .07¼- —
11-13%, bbls., same basis.lb. .08 - —
14-16%, bbls., same basis.lb. .08¼- —
17-19%, bbls., same basis.lb. .08½- —
20-21%, bbls., same basis.lb. .08¾- —
22-23%, bbls., same basis.lb. .09 - —
24-25%, bbls., same basis.lb. .09¼- —
26-27%, bbls., same basis.lb. .09½- —
28-29%, bbls., same basis.lb. .10 - —
30-31%, bbls., same basis.lb. .10¼- —
32-33%, bbls., same basis.lb. .13 - —
34-35%, bbls., same basis.lb. .13 - —
36-40%, bbls., same basis.lb. .14 - —
41-45%, bbls., same basis.lb. .17 - —
46-50%, bbls., same basis.lb. .17½- —
51-55%, bbls., same basis.lb. .18 - —
56-60%, bbls., same basis.lb. .18½- —
61-65%, bbls., same basis.lb. .19 - —
66-70%, bbls., same basis.lb. .20 - —
71-75%, bbls., same basis.lb. .21 - —

Green, chrome, prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1½c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City and Wichita, prices are equalized with Chicago.

Chrome oxide, pure, dms., wks. lb. .24 - —
Malachite,[1] thioflavin toner, tungstic, bbls., works..lb. 3.50 - —
molybdic, bbls., works..lb. 3.00 - —
Phthalocyanin,[1] green toner, bbls., works..lb. 4.00 - 5.00
blue, green shade, bbls., works..lb. 4.50 - 4.70
tetrahydroxide, bbls.....lb. .85 - —

Paris (see P).

Tungstated, brilliant, kgs....lb. 3.00 - —
emerald, kgs.....lb. 2.00 - —

Verdigris (see V).

Green dyes are listed under Dyes.

Grindelia robusta, bls.....lb. .11 - .13
Guaiac resin, cs.....lb. .85 - .85
strained, cs. .....lb. 1.50 - 1.60
Wood, bls. .....lb. .05 - .06
Guaiacol, liq., dms.....lb. 1.75 - 2.01
Carbonate, fib. dms.....lb. 2.49 - 2.74
Guarana, powd., cs.....lb. 1.20 - 1.80
Gum accroides (see Gum yacca).
Aloe (see A).
Gum, ammoniac, tears, cs....lb. 1.20 - 1.25
Arabic, amber, sorts, bgs....lb. .18 - .18½
powd., bbls.....lb. .26 - .28
white, sorts, 1, bgs.....lb. .33 - .35
Asafetida (see A).
Asphaltum (see A).
Benzoin, Siam, cs.....lb. 3.00 - 3.50
Sumatra, cs.....lb. .80 - .85
Camphor (see C).
Copal,[1] Congo, sorted, No. 30, bgs., c.l., ex dock or port whse..lb. .53¾- —
l.c.l. .....lb. .56 - .56¾
31, same basis.....lb. .21¼- —
l.c.l. .....lb. .21¾- .21¾
32, same basis.....lb. .15¾- —
l.c.l. .....lb. .16 - .16¼
33, same basis.....lb. .14 - —
l.c.l. .....lb. .14¼- .14½
34, same basis.....lb. .09¾- —
l.c.l. .....lb. .09½- .09¾
35, same basis.....lb. .15¾- —
l.c.l. .....lb. .16¼- .16½
36, same basis.....lb. .12¾- —
l.c.l. .....lb. .12¾- .13¼
37, same basis.....lb. .18¼- —
l.c.l. .....lb. .18¾- .18½
38, same basis.....lb. .12¼- —
l.c.l. .....lb. .12½- .12¾
39, same basis.....lb. .10¾- —
l.c.l. .....lb. .10¾- .11¼
40, same basis.....lb. .08 - —
l.c.l. .....lb. .08¼- .08½
41, same basis.....lb. .11¾- —
l.c.l. .....lb. .11¾- .12¼
unsorted, No. 1, bgs., c.l., same basis..lb. .14¾- —
l.c.l., same basis ...lb. .14¾- .14¾
2, bgs., c.l., same basis.lb. .12¾- —
l.c.l., same basis....lb. .12¾- .13½
3, bgs., c.l., same basis.lb. .11¼- —
l.c.l., same basis....lb. .11½- .11¾
FAD, bgs., c.l., same basis...lb. .14¾- —
l.c.l., same basis....lb. .15¼- .15¾
East India,[1] Batu, bold, scraped, bgs., c.l., ex dock or port whse..lb. .10¼- —
unscraped, same basis, lb. .09 - —
chips, same basis...lb. .12 - —
dust, same basis....lb. .06½- —
nubs and chips, same basis..lb. .05¾- —
black, bold, scraped, bgs., c.l., ex dock or port whse..lb. .12 - —
unscraped, same basis, lb. .07½- —
nubs and chips, same basis..lb. .07¼- —
Pale, Hiroe-Macassar,[1] bold, bgs., c.l., ex dock or port whse., c.l..lb. .17¾- —
chips, same basis...lb. .11½- —
dust, same basis....lb. .05½- —
nubs, same basis....lb. .13¾- —
Singapore Rasak, bold, bgs., ex dock or port whse..lb. .22¾- —
chips, same basis...lb. .11¾- —
dust, same basis....lb. .05½- —
nubs, same basis....lb. .16¾- —
Macassar,[1] WS, bgs., c.l., ex dock or port whse..lb. .11¾- —
MA, same basis.....lb. .09¾- —
MB, same basis.....lb. .09¼- —
dust, same basis.....lb. .07¾- —
Manila, Bosax,[1] hard, bold, amber, light, baks., c.l., ex dock or port whse..lb. .13½- —
dark, light, same basis, lb. .14½- —
white, same basis....lb. .15½- —
Loba,[1] A, bgs., c.l., ex dock or port whse..lb. .14 - —
B, same basis.....lb. .13¾- —
C, same basis.....lb. .13¾- —
CBB, same basis.....lb. .12 - —
CNE, same basis.....lb. .10 - —
D, same basis.....lb. .12¾- —
DBB, same basis.....lb. .11 - —
DU, same basis.....lb. .08¾- —
DK, same basis.....lb. .09½- —
MA, same basis.....lb. .09¾- —
dust, same basis.....lb. .07¾- —
MB, same basis.....lb. .09¾- —
WS, same basis.....lb. .11¾- —
Manila-Singapore,[1] white split chips, bgs., c.l., ex dock or port whse..lb. .15¾- —
dust, same basis.....lb. .07¾- —
whse. entry point, c.l.. lb. .08¾- —
Philippine,[1] Manila, extra bold, pale scraped, baks., ex dock or port whse..lb. .15 - —
bold, pale scraped, same basis..lb. .15 - —
extra pale, bold, sorts, same basis..lb. .12¾- —
pale chips, bold, same basis..lb. .13 - —
pale nubs, WCB, same basis..lb. .13¾- —

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Uversol Manganese Liquid .. 6%	AN — TT — D — 643	7-11-41
Uversol Zinc Liquid 8%		

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Manganese Linoleate Solid 8.2%	52 — L — 11a	7-1-41
Maganese Resinate Precipitated	52 — R — 8a	9-1-38
Cobalt Acetate	51 — C — 23a	6-1-39
Aluminum Stearate	51 — A — 11	5-1-35

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Gum, copal, Philippine, pale small chips, same basis..lb. .11½- —
SG, same basis.....lb. .10½- —
seeds and dust, same basis, lb. .08¾- —
Pontianak, bold, scraped, bgs., c.l., ex dock or port whse. lb. .23¾- —
mixed, same basis.....lb. .17¾- —
chips, small, same basis..lb. .12¾- —
cuttings of split, same basis..lb. .19½- —
nubs, same basis.....lb. .18 - —
Dammar,[1] Batavia, A, cs., c.l., same basis as copal..lb. .35¾- —
A/C, same basis.....lb. .31½- —
A/D, same basis.....lb. .28¾- —
A/E, same basis.....lb. .25¾- —
B, same basis.....lb. .34¾- —
C, same basis.....lb. .28¾- —
D, same basis.....lb. .25¾- —
E, same basis.....lb. .18¾- —
F, same basis.....lb. .13¾- —
dust, same basis.....lb. .13¾- —
Singapore,[1] No. 1, cs., c.l...lb. .30¾- —
2, same basis.....lb. .25 - —
3, bgs., same basis.....lb. .12¾- —
chips, cs., same basis.....lb. .23½- —
dust, bgs., same basis....lb. .13 - —
seeds, cs., same basis.....lb. .17¾- —
Elemi,[1] cns., c.l., ex dock or port whse. entry port.....lb. .08¾- —
Ester,[1] ordinary, dms., c.l., divd. N. Eng., Middle Atlantic States, Va., W. Va., N. C., Ky., Ohio, Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn., or St. Louis, Mo.....lb. .09½- —
l.c.l., same basis.....lb. .09¾- .10
other points, dms., c.l., divd. lb. .10 - .11
l.c.l., same basis.....lb. .10½- .12
Euphorbium, cs.....lb. 1.50 Nom.
Galbanum, cs.....lb. 1.60 - 1.65
Gamboge, pipe, cs.....lb. 2.30 - 2.35
powd., bbls.....lb. 2.50 - 2.55
Guaiac (see Guaiac resin).
Karaya, bbls., bxs., dms....lb. .14 - .33
Kauri,[1] brown, chips, extra, bgs., c.l., ex dock or port whse..lb. .18 - —
80%, same basis.....lb. .16 - —
dust, same basis.....lb. .12½- —
nubs, same basis.....lb. .24 - —
No. 1 extra, same basis..lb. .34 - —
superior, same basis....lb. .31 - —
No. 2 extra, same basis...lb. .30 - —
superior, same basis....lb. .27½- —
No. 3, same basis.....lb. .23 - —
x, same basis.....lb. .36 - —
2x, same basis.....lb. .49 - —
3x, same basis.....lb. .77 - —
bush, assorted, same basis..lb. .35 - —
bright, same basis.....lb. .18 - —
bold, same basis.....lb. .40 - —
chips, same basis.....lb. .32 - —
dark, same basis.....lb. .18 - —
white, chips, pale, same basis, lb. .20¾- —
extra, same basis.....lb. .25½- —
dust, pale, same basis....lb. .20¾- —
extra, No. 1, same basis..lb. .43 - —
No. 2, same basis.....lb. .31 - —
No. 3, same basis.....lb. .30 - —
superior, No. 1, same basis.. lb. .41 - —
No. 2, same basis.....lb. .31 - —
No. 3, same basis.....lb. .22 - —
3x, same basis.....lb. .65¾- —
4x, same basis.....lb. .66 - —
5x, same basis.....lb. 1.50 - —
Locust bean, powd., bbls....lb. 1.25 Nom.
Mastic, cs.....lb. 3.65 - —
Gum, myrrh, USP, cs.....lb. .75 - .76
Olibanum, siftings, cs.....lb. .11½- .13
tears, cs.....lb. .18 - .35
Opium (see O).
Red gum (see Gum, accroides).
Rosin (see R).
Sandarac,[1] cs., ex dock or port whse..lb. .97½- —
Scammony, cs.....lb. 1.30 - 1.35
Talha, bgs.....lb. .10 - .11
Tragacanth, No. 1, cs.....lb. 4.00 - 4.25
No. 2, cs.....lb. 3.75 - 4.00
No. 3, cs.....lb. 1.10 - 1.20
Yacca,[1] red gum, coarse, bgs., ex dock or port whse..lb. .06 - —
powdered .....lb. .07¼- —
Gypsum, Keene's cement, paper bgs., c.l., f.o.b. Acme, Tex., frt. equald..ton.22.65 - —
Medicine Lodge, Kan., frt. equald..ton.17.00 - —
Harlem River, N. Y., frt. equald..ton.20.25 - —
New Brighton, N. Y., frt. equald..ton.20.25 - —
Southard, Oklahoma, frt. equald..ton.17.00 - —
Sweetwater, Texas, frt. equald..ton.21.45 - —
Plaster of paris, paper bgs., f.o.b. Blue Rapids, Kans., frt. equald..ton.12.50 - —
Acme, Tex., frt. equald.ton.12.50 - —
Harlem River, N. Y., frt. equald..ton.13.00 - —
Medicine Lodge, Kans., frt. equald..ton.12.50 - —
New Brighton, N. Y., frt. equald..ton.13.00 - —
Southard, Oklahoma, frt. equald..ton.12.50 - —
Sweetwater, Texas, frt. equald..ton.12.50 - —
Stucco, paper bags, c.l., f.o.b. Acme, Tex.; Akron, N. Y.; Blue Rapids, Kansas; Clarence Center, N. Y.; Fort Dodge, Ia.; Grand Rapids, Mich.; Gypsum, O.; Harlem River, N. Y.; National City, Mich.; New Brighton, N. Y.; Plasteree, Ga.; Portsmouth, N. H.; Roton, Texas; Southard Okla.; Sweetwater, Texas; frt. equald..ton. 8.00 - —
Saltville, Va. .....ton. 9.00 - —
Terra Alba, dom., paper bags, c.l., f.o.b. New Brighton, N.Y.; Southard, Okla..ton.12.00 - —
Harlem River, N.Y..ton.13.00 - —

H

Hawthorn berries, bgs.....lb. 1.10 - 1.15
Heliotropin, cryst., cns.....lb. 3.25 - 3.35
Hellebore, white, powd., bbls..lb. .46 - .47
Helonias root, bls.....lb. .82 - .88
Hematine, cryst., bbls., No. 1...lb. .24 - —
No. 2.....lb. .20 - —
No. 3.....lb. .20 - —
No. 4.....lb. .26 - —
No. 5.....lb. .24 - —
paste, bbls., No. 1.....lb. .14½- —
No. 2.....lb. .12½- —
No. 3.....lb. .12½- —
Hemlock bark extract,[6] 25% tan, c.l., bbls., works..lb. .0332- —
tanks, works .....lb. .0335- —
Hempseed, bgs.....lb. .25 - .26
Henbane leaves, bbls.....lb. 1.65 - 1.70
Henbane leaves, bbls.....lb. 1.40 - 1.75
powd., bbls., bxs.....lb. .23 - .24
Heptane,[1] 86°-100° C, industrial grade, dms., l.c.l., Group 3..gal. .12¾- —
l.c.l., Group 3.....gal. .10 - —
tankcars, Group 3.....gal. .10 - —
77°-115°, industrial, dms., c.l., Group 3..gal. .12 - —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .10½- —
laboratory grade, dms., c.l., Group 3..lb. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gals., Group 3....gal. .55 - —
Hexaldehyde, normal, dms., c.l., works..lb. 1.10 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine,[2,6] tech., dms., 1,500 lbs. or more, shipment, f.o.b. Perth Amboy or N.Y.C..lb. .32 - —
150 to 1,350 lbs., shipment, same basis..lb. .33 - —
USP, dms., 500 lbs. or more, shipment, same basis..lb. .38 - —
fib. ctns., same basis.....lb. .40 - —
Hexanes,[1] 60°-70°C., industrial grade, dms., c.l., Group 3, gal. .13½- —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .10½- .11
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gals., Group 3.....gal. .55 - —
Hexanol, dms., l.c.l., works..lb. .35 - —
Homatropine hydrobromide, 25 oz. lots, bots..oz.37.50 -42.00
Hoofmeal, 17-18% ammon., bulk, f.o.b. Chicago..unit. 4.35 - 4.50
Hops, NF, bls.....lb. .48 - 1.50
Horehound, bls.....lb. .10 - .12
Hydrangea root, bls.....lb. No prices
Hydrastine, bots, 4 ozs.....oz.20.00 - —
Hydrochloride, bots., 4 ozs...oz.20.00 - —
Sulphate, bots., 4 ozs.....oz.29.00 - —
Hydrastinine, 15 grs., bots..bot. 1.95 - —
Hydrastis (see Golden seal).
Hydrofuramide, dms., 100 lbs. or more, works..lb. .30 - —
fib. ctns., works.....lb. .40 - —
Hydrogen peroxide, USP, bbls.lb. 100 vols., cbys., E. of Miss. River; West Coast via Panama Canal..lb. .03¾- .04
.16 - .18½
Hydroquinone, bbls., dms....lb. .90 - .94
Hydroxycitronellal, cns.....lb. 6.25 - 7.50
dms., extra, ret'able, divd...lb. 4.50 - —
Hyoscine hydrobromide, bots., gram. 4.50 - —
Hyoscyamine, bots.....oz.20.00 -37.50
Hydrobromide, bots.....oz.20.00 -37.50
Sulphate, bots.....oz.20.00 -37.50
Hypernic, cryst., bbls., No. 1...lb. .42 - —
No. 2.....lb. .34 - —
extract, bbls., No. 1.....lb. .24 - —
No. 2.....lb. .19 - —

I

Iceland moss, bls.....lb. 1.45 - 1.50
Iothammol, N.F., bots.....lb. 4.17 - 4.27
Indian red (see Red Indian).
Indigo, nat., chests.....lb. 2.14 - 2.20
synth., paste, bbls.....lb. .16½- .19
powd., bbls.....lb. .74½- .85
Indium metal.....oz.12.50 - —
Indol, CP, bots.....lb.26.50 -27.50
Insect flowers (see Pyrethrum).
Iodine, crude, 33-lb. jars.....lb. 1.67 - —
150-lb. kgs., less 5% ex whse., Staten Island..lb. 1.35 - 1.44
resubl., 5-lb. bots.....lb. 2.10 - —
25-lb. bots., jars.....lb. 2.00 - —
Iodoform, 100-lb. dms., kgs...lb. 3.95 - 4.10
jars .....lb. 4.20 - —
Ipecac root, bgs.....lb. 1.75 - 1.85
powd., bgs.....lb. 1.85 - 1.95
Irish moss, ordinary, bls.....lb. .20 - .22
powd., 80-90 mesh, bbls..lb. .23 - .25
prime bleached, bls.....lb. .85 - .90
powd. .....lb. .53 - .56
Iron acetate, solut., USP IV, 100-lb. cbys..lb. .17 - —
50 lbs., djns.....lb. .18 - —
liquor, bbls., c.l., divd....lb. .03 - —
l.c.l., divd.....lb. .04 - —
Chloride (ferric), tech., anhydr., 390-lb. dms..100 lbs. 4.65 - 6.25
150-lb. dms.....100 lbs. 5.00 - 6.00
cryst., bbls., works, frt. alld. or equald..lb. .06 - .08
kegs, works, frt. alld. or equald..lb. .07½- .08
USP X, cryst., lump, bbls..lb. .07½- —
kegs .....lb. .08½- —
solut., cbys., works, frt. alld. or equald..lb. .06½- .07½
djns .....lb. .07½- —
Citrate, USP VIII, pearls....lb. .72 - .75
powd., cns.....lb. .84 - .87
scales .....lb. .77 - .80
Glycerophosphate, bbls., 1,000-lb. lots..lb. 3.30 - 3.39
100-lb. lots.....lb. 3.40 - 3.49
cns., 25 lbs.....lb. 3.52 - 3.62
Hyposulphite, bbls., dms....lb. 1.50 - 1.59
Iodide, bots.....lb. 3.18 - 3.52
syrup, cbys.....lb. .39 - .40
bots. .....lb. .53 - .59
Nitrate, red, tech., dms....lb. .03½- .04
Oxalate, powd., kgs.....lb. .47 - .49
cns. .....lb. .53 - —
pearls, cns. .....lb. .82 - —
Oxide, black (see Black iron oxide).
Phosphate, ferric, pearls, cns., 50 lbs..lb. .54 - —
25 lbs.....lb. .57 - —
scales, cns., 50 lbs.....lb. .59 - —
25 lbs.....lb. .62 - —
Pyrophosphate, pearls, cns....lb. .59 - .62
scales, cns. .....lb. .64 - .67
Reduced, 99% cs.....lb. .65 - .75
Sulphate, tech. (see Coppers and ferric sulphate).
USP, cryst., 275-lb. bbls....lb. .05½- .06
dms., 100 lbs.....lb. .08 - —
Iron-ammonia citrate, brown, grnan, gran., dms., 2,000-lb. lots..lb. .32 - —
200-lb. lots.....lb. .35 - —
pearls, dms., 2,000-lb. lots..lb. .32 - —
200-lb. lots .....lb. .35 - —
scales, dms., 2,000-lb. lots..lb. .44 - —
200-lb. lots .....lb. .47 - —
Iron-ammonia oxalate,[2] bbls...lb. .23½- —
dms., kgs.....lb. .25½- —
Iron-soda oxalate, bbls.....lb. .23½- —
dms. .....lb. .25½- .26½
Isobutyl acetate, dms., works..lb. .0860- —
tanks, works.....lb. .0760- —
Propionate, dms., works.....lb. .102 - —
Isopentane, single 50-lb. dm., works..gal. .45 - —
single 10-gal. dm., works.gal. .55 - —
Isophorone, dms., works.....lb. .35 - —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., 5 gals., E. of Rockies, frt. alld..lb. .12 - —
dms., c.l., E. of Rockies, frt. alld..lb. .11 - —
l.c.l., E. of Rockies, frt. alld..lb. .11½- —
tanks, E. of Rockies, frt. alld. lb. .10 - —

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Isopropyl alcohol (see Alcohol).
Ether, dms., c.l. lb. .06 - —
l.c.l. lb. .06½- —
tanks lb. .04½- —
Isopropylamine, dms., works lb. .85 - —

J

Jaborandi leaves, bls. lb. .09 - .10
Jalap root, NF, bls. lb. .45 - .62
powd., bbls., bxs. lb. .52 - .68
resin, lump, 100-lb. lots, cns. lb. 5.85 - —
powd., bxs lb. 5.90 - —
Juniper berries, bgs. lb. .45 - .55

K

Kamala, tins lb. .39 - .40
Kaolin (see China clay).
Kava kava root, bls. lb. .23 - .24
Kerosene[1] at refinery:—
Ark., 41-43 w.w., bulk, tank gal. .04½- —
Bayonne, 41-43 w.w., tanks gal. .071 - —
California (f.o.b. San Francisco), truck gal. .11½- —
Gulf ports, 41-43 w.w., bulk gal. .04½- .04⅝
Okla.-Tex., 41-43 w.w., tank gal. .04½- —
Penn., 45 w.w., tanks gal. .07 - .07¼
46 w.w., tanks gal. .06⅝- .069⅛
47 w.w., tanks gal. .06⅞- .0705
Kola nuts, bxs lb. .10 - .15

L

Lady slipper root, bls. lb. .50 - .90
Lanolin (see Adeps lanae).
Lard,[1,5] city, trcs. 100 lbs. 13.50 - —
Western, choice, trcs. 100 lbs. 13.50 - —
Larkspur seed, bgs. lb. 3.75 - 4.00
Laurel berries, bls. lb. .25 - .26
Leaves, Greek, bls. lb. .35 - .40
Cyprus, bls. lb. .30 - .31
Portuguese, bls. lb. .15½- .16⅛
Spanish lb. .32 - .33
Lavender flowers, ord., bls. lb. .70 - .75
medium, bls. lb. .80 - .85
select, bls. lb. .90 - .95
Lead,[1] metal (see paint market).
Acetate,[5] white, broken, bbls. lb. .12½- —
cryst., bbls. lb. .12½- —
gran., bbls. lb. .13½- —
powd., bbls. lb. .13¾- —
Arsenate,[1,6] paste, stand., cns., c.l. lb. .05⅝- .06
l.c.l. lb. .06 - .06¼
powder, basic, 3-lb. bgs. or larger, c.l. lb. .11½- .12
l.c.l. lb. .12 - .12½
1-lb. ctns., c.l. lb. .18½- .22½
l.c.l. lb. .19 - .23
3-lb. bgs. or larger, c.l. lb. .11 - .11⅛
l.c.l. lb. .11½- .12
1-lb. bgs., c.l. lb. .16 - .20
l.c.l. lb. .16½- .20¼
1-lb. ctns., c.l. lb. .18 - .22
l.c.l. lb. .18½- .22¼
standard, ⅛-lb. ctns., c.l. lb. .21 - .25
l.c.l. lb. .21½- .25½

Inside column represents maximum prices set up by OPA to manufacturers or distributors; outside column to all other purchasers. Lead arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. or over; no frt. or truck allowance for works or whse. pick-ups.

Blue, basic sulphate, dms., dlvd. E. lb. .07½- —
dlvd., Ariz., Cal., Col., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. lb. .07¾- —
l.c.l., dlvd. E. lb. .07¾- —
Ariz., Cal., Col., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. lb. .08 - —
Carbonate (see Lead, white).
Chloride, 100-lb. fib. dms. lb. .49 - —
Iodide, NF V, powd., bots. lb. 2.80 - —
jars lb. 2.69 - —
Linoleate, pale, precip., bbls. lb. .22½- —
Metal (see daily quotations in market report).
Metallic, paste, 1 to 5-ton lots, f.o.b. works lb. .19¾- —
smaller lots, same basis lb. .21¾- —
Nitrate, bbls. lb. .12½- —
Peroxide, powd., tech., bbls. lb. .23 - —
Oleate, bbls. lb. .17¾- —
Red, dry, 95% or less Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore. and Wash. lb. .09¼- —
Other points lb. .09 - —
l.c.l., 5 tons, dlvd. Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex., and W. Cascade Mts. in Ore. and Wash. lb. .09¾- —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash. lb. .10¼- —
Colo., Mont., N. Mex., Wyo. lb. .10 - —
other points lb. .09½- —
97% Pb_3O_4, bbls. (20 tons), dlvd. Ala., etc. lb. .09½- —
other points lb. .09¾- —
l.c.l., 5 tons, dlvd. Ala., etc. lb. .10 - —
Colo., etc. lb. .10¼- —
Ariz., etc. lb. .10½- —
other points lb. .09¾- —
smaller lots, dlvd. Ala. lb. .10¾- —
Ariz., etc. lb. .11 - —
Colo., etc. lb. .10¾- —
other points lb. .10¼- —
98%, Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ala., etc. lb. .09¾- —
other points lb. .09½- —
l.c.l., 5 tons, dlvd. Ala., etc. lb. .10¼- —
Ariz., etc. lb. .10¾- —
Colo., etc. lb. .10½- —
other points lb. .10 - —
smaller lots, dlvd. Ala., etc. lb. .10½- —
Ariz., etc. lb. .11¼- —
Colo., etc. lb. .11 - —
other points lb. .10¾- —
in oil, 85% min., 100-lb. kgs. lb. .14 - —
Resinate, fused, 15%, bbls., c.l., lb. .10 - .12
l.c.l., bbls., c.l. lb. .12 - .14
6%, bbls., c.l. lb. .09½- .10½
l.c.l. lb. .10¾- —
Silicate, bgs., 5 tons lb. .0730- —
smaller lots lb. .0780- —
Stearate, bbls. lb. .81 - .88
Sulphate (see Lead, white basic sulphate).
titanate, bgs. or bbls., c.l. (20 tons), works, frt. alld. lb. .11 - —
Titanate, bgs. or bbls., l.c.l., 5 tons, one delivery, E., frt. alld. lb. .11½- —
Pac. Cst., ex whse. lb. .11¼- —
smaller lots, E., frt. alld. lb. .11½- —
Pac. Cst., ex whse. lb. .11⅝- —

Lead, white, dry, basic carbonate, bbls., c.l., dlvd. Ariz., Calif., Colo., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., and Wyo. lb. .08¼- —
other points lb. .08¾- —
l.c.l., dlvd. Ariz., etc. lb. .08¾- —
other points lb. .09¼- —
basic sulphate, bbls., c.l., dlvd. Ariz., etc. lb. .07½- —
other points lb. .07¾- —
l.c.l., dlvd. Ariz., etc. lb. .08 - —
other points lb. .07½- —
in oil, consumers, 100-lb. kgs. lb. .13¾- —
dealers, 100-lb. kgs. lb. .11¾- —
painters 100-lb. kgs. lb. .13¾- —
Consumers' prices and painters' prices are the lower of orders of 500 lbs. or more.
Lecithin, edible, dms., c.l. lb. .28½- —
l.c.l. lb. .29 - .45
tech., dms., c.l. lb. .26 - —
l.c.l. lb. .26½- .37½
in cocoa butter, dms., c.l. lb. .40½- —
l.c.l. lb. .41 - .55
Lemon peel, bls. lb. .35 - .40
Licorice extract, mass, cns. lb. .25 - .72
powd., bbls. lb. .60 - .68
root, natural, Indian, bls. lb. .06 - .09
powder, bbls. lb. .12 - .18
Russian, bls. lb. .08¼- .09
Lignin extract, tanning grade, bgs., c.l., works lb. .04 - —
Lime, chemical (quicklime), lump or pebble, bulk, f.o.b.:—
Adams, Mass. ton. 8.00 - —
Annville, Pa. ton. 7.50 - —
Bellefonte, Pa. ton. 7.50 - —
Berkley, W. Va. ton. 7.50 - —
Carey, Ohio ton. 7.00 - —
Cedar Hollow, Pa. ton. 8.50 - —
Crab Orchard, Tenn. ton. 6.25 - —
Eagle Mountain, Va. ton. 7.00 - —
Farnams, Mass. ton. 8.00 - —
Gibsonburg, Ohio ton. 7.00 - —
Hannibal, Mo. ton. 6.50 - —
Keystone, Ala. ton. 6.25 - —
Knoxville, Tenn. ton. 6.25 - —
Limedale, Ark. ton. 7.00 - —
Longview, Ala. ton. 6.25 - —
Manistique, Mich. ton. 8.00 - —
Martinsburg, W. Va. ton. 7.50 - —
Menominee, Mich. ton. 8.00 - —
Mitchell, Ind. ton. 6.50 - —
Newala, Ala. ton. 6.25 - —
Rincon, Cal. ton. 13.00 - —
Ripplemead, Va. ton. 7.00 - —
Riverton, Va. ton. 7.00 - —
Rockland, Me. ton. 8.00 - —
San Francisco, Cal. ton. 13.00 - —
Scioto, Ohio ton. 6.50 - —
Springfield, Mo. ton. 7.00 - —
Woodville, Ohio ton. 7.00 - —
York, Pa. ton. 9.00 - —
hydrated, f.o.b. Adams, Mass. ton. 8.50 - —
Annville, Pa. ton. 9.00 - —
Bellefonte, Pa. ton. 9.00 - —
Berkley, W. Va. ton. 9.00 - —
Buffalo, N. Y. ton. 10.00 - —
Carey, Ohio ton. 8.50 - —
Cedar Hallow, Pa. ton. 9.00 - —
Crab Orchard, Tenn. ton. 9.00 - —
Eagle Mountain, Va. ton. 8.50 - —
Farnams, Mass. ton. 8.50 - —
Gibsonburg, Ohio ton. 8.50 - —
Hannibal, Mo. ton. 8.50 - —
Keystone, Ala. ton. 9.00 - —
Knoxville, Tenn. ton. 9.00 - —
Le Roy, Minn. ton. 10.00 - —
Lime Crest, N. J. ton. 8.50 - —
Limedale, Ark. ton. 9.00 - —
Longview, Ala. ton. 9.00 - —
Louisville, Ky. ton. 14.50 - —
Manistique, Mich. ton. 9.50 - —
Marblehead, Ohio ton. 9.50 - —
Martinsburg, W. Va. ton. 9.00 - —
Mitchell, Ind. ton. 9.00 - —
Newala, Ala. ton. 9.00 - —
Potoskey, Mich. ton. 9.00 - —
Port Island, Mich. ton. 9.00 - —
Rapid City, S. D. ton. 12.00 - —
Ripplemead, Va. ton. 9.00 - —
Rockland, Me. ton. 9.00 - —
San Francisco, Cal. ton. 16.00 - —
Springfield, Mo. ton. 9.00 - —
Woodville, Ohio ton. 8.50 - —
York, Pa. ton. 8.50 - —
spray, paper bags, f.o.b.:—
Adams, Mass. ton. 9.50 - —
Annville, Pa. ton. 9.50 - —
Bellefonte, Pa. ton. 9.50 - —
Carey, Ohio ton. 11.00 - —
Farnams, Mass. ton. 10.00 - —
Gibsonburg, Ohio ton. 11.00 - —
Lime Crest, N. J. ton. 8.50 - —
Marblehead, Ohio ton. 11.00 - —
Rockland, Me. ton. 10.00 - —
Scioto, Ohio ton. 10.00 - —
Woodville, Ohio ton. 11.00 - —
York, Pa. ton. 7.50 - —
Lime salts (see Calcium).
Lime-sulphur, dry, dealers, bgs., c.l., E. of and incl. N. Dak., S. Dak., Neb., Kans., Okla., Tex. lb. No price
Linalool, cns. lb. 6.75 - 8.25
Linalyl acetate, 70% to 80%, cns. lb. 5.00 - 6.00
90%, cns. lb. 6.50 - 6.75
92%, cns. lb. 7.00 - 7.25
Linden flowers, bls. lb. 1.10 - 1.15
Linseed meal,[1] bulk, f.o.b. crushers' works, Minneapolis, c.l. ton. 40.00 - —
sacked, same basis, c.l. ton. 43.50 - —
pea-size meal and pellets, same basis, c.l. ton. 45.00 - —
Litharge, com'l powd., bbls., 20 tons, dlvd. Ala., Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo. and E. of Cascade Mts. in Ore., and Wash. lb. .08¼- —
other points lb. .08 - —
5 tons, dlvd. Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash. lb. .08¾- —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash. lb. .09¼- —
Colo., Mont., N. Mex., Wyo. lb. .08 - —
Other points lb. .08¼- —
smaller lots, dlvd. Ala., etc. lb. .09¼- —
Ariz., etc. lb. .09¾- —
Colo., etc. lb. .09½- —
Other points lb. .09 - —
Lithium,[6] bromide, bbls., 100 lbs., works, frt. equald. lb. 1.90 - —
smaller lots, works lb. 1.93 - 1.95
Carbonate, NF, 250-lb. bbls. lb. 1.25 - —
100-lb. kgs. lb. 1.30 - —
Chloride, 25-lb. jars lb. 1.65 - 1.70
Citrate, 250-lb. bbls. lb. 1.40 - —
25-lb. dms. lb. 1.45 - —
100-lb. kgs. lb. 1.40 - —
Fluoride, bbls. lb. 2.45 - 2.60
Hydroxide, jars lb. 1.25 - 1.40
Iodide, 5-lb. bots. lb. 5.20 - —
25-lb. jars lb. 5.05 - —
Lithopone,[1] titanated (high strength), bgs., c.l. (20 tons) lb. .0560- —
smaller lots lb. .0585- —
bbls., c.l. (20 tons) lb. .0585- —
smaller lots lb. .0610- —

Lithopone, ordinary, bgs., c.l. (20 tons)..lb. .04½- —
smaller lots.....lb. .04½- —
bbls. c.l. (20 tons)....lb. .04½- —
smaller lots.....lb. .04¾- —

Lithopone in car lots is ¼c. per lb. higher delivered to the Pac. Cst. and in less car lots is ½c. higher ex whse., Pac. Cst.

Liverwort, leaves, bls.....lb. .60 - .62
Lobelia, herb, bls.....lb. .25 - .26
Lobeline sulphate, bots., wks. os. 25.50 -28.00
Logwood, cryst., No. 1, bbls...lb. .28 - —
No. 2, bbls.....lb. .26 - —
extract, liquid, No. 1, bbls..lb. .14 - —
No. 2, bbls.....lb. .13 - —
No. 3, bbls.....lb. .12½- —
No. 4, bbls.....lb. .10 - —
solid, No. 1, bxs.....lb. .23½- —
No. 2, bxs.....lb. .21½- —
Lovage root, dom., bls.....lb. .50 - .51
imported, bls.....lb. 4.50 - —
Lupulin, NF, tins.....lb. 4.75 Nom.
Lycopodium, USP, cs.....lb. 7.00 - 7.50

M

Mace,[1] Amboyna, cs.....lb. .77 - .78
Banda, cs.....lb. .98 - 1.60
West Indian, cs.....lb. .75 Nom.
Madder, Dutch, bbls.....lb. .24 - .30
Magnesia, arsenate,[6,1] dms....lb. .153 - .18
Calcined, tech., USP, bbls., works..lb. .26 - —
Carbonate, tech., Zone 1, c.l., bgs..lb. .06¼- —
bbls.....lb. .07½- —
kgs.....lb. .08¾- —
l.c.l., bgs.....lb. .07¼- —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
Zone 2, c.l., bgs.....lb. .06¼- —
bbls.....lb. .07½- —
kgs.....lb. .08¾- —
l.c.l., bgs.....lb. .07 - —
bbls.....lb. .08¼- —
kgs.....lb. .09½- —
USP, Zone 1, c.l., bgs.....lb. .09 - —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
l.c.l., bgs.....lb. .09 - —
bbls.....lb. .09¼- —
kgs.....lb. .10¾- —
Zone 2, c.l., bgs.....lb. .06¼- —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
l.c.l., bgs.....lb. .08¾- —
bbls.....lb. .09¼- —
kgs.....lb. .10¼- —

Magnesia:—Zone 1—Mass., Conn., R. I., N.Y., N.J., Pa., D. of C., Del. and Md., c.l. shipments, frt. equald. with Phillipsburg, Ambler, Plymouth Meeting, Valley Forge, and New York. On l.c.l. shipments, frt. alld. including divd. storedoor. Magnesite prices are f.o.b. Plymouth Meeting. Zone 2—Balance of U. S.; prices f.o.b. Plymouth Meeting, Ambler, Phillipsburg, Valley Forge and New York.

Magnesium, chloride, anhyd., dom., bbls., divd..lb. .13 - —
flake, dom., bbls., works., c.l. ton.82.00 - —
l.c.l., bbls., works.....ton.89.00 -92.00
Fluoride, bbls.....lb. .40 - .50
Hydroxide, med., 200-lb. bbls.lb. .25 - —
25-lb. dms.....lb. .30 - —
100-lb. bxs.....lb. .26 - —
Hypophosphite, cns., 100 lbs.lb. 1.45 - —
Oxide (see Calcined).
Palmitate, bbls.....lb. .82 - .85
Peroxide, 15%, dms., works..lb. 1.00 - 1.35
Silicate (see Talc).
Silicofluoride, bbls.....lb. .18 - .20
Stearate, bbls., ton lots.....lb. .31 - —
less than ton lots.....lb. .32 - —
Sulphate (see Epsom salt).
Magnesium, trisilicate, 1,000-lb. contracts, dms..lb. .37 - —
smaller lots, dms.....lb. .42 - —
cns., cs.....lb. .40 - .42
Magnesite, cal., dom., powd., bgs., f.o.b. mines, Calif..ton.58.75 - —
l.c.l., divd. N. Y....ton.84.00 -90.00
dead-burned, dom.,[1] bulk, c.l., f.o.b. Chewelah, Wash..ton.22.00 -40.50
Malva flowers, black, bls.....lb. 1.75 - 2.00
blue, bls.....lb. 2.25 - 2.50
Leaves, bls.....lb. .40 - .55
Manaca root, bls.....lb. .24 - .25
Mandrake root, bls.....lb. .21 - .22
Manganese acetate, dms.....lb. .26½- —
Arsenate,[6] bgs.....lb. .12 - .12½
Borate, tech., bbls.....lb. .15 - .17
Carbonate, bbls.....lb. .1[illegible] - —
Chloride, bbls.....lb. .14 Nom.
Dioxide, African, battery, 84-87%, bbls., 28-40 tons, works..ton.74.00 - —
5-15 tons, works.....ton.77.00 - —
½, 4 tons, works....ton.82.00 - —
Caucasian, 85-90%, bbls., c.l., works..ton.74.00 - —
l.c.l., 5 tons, works...ton.77.00 - —
Dioxide, Caucasian, 85-90%, smaller lots, works..ton.82.00 - —
burlap bgs., c.l., works.. ton.71.75 - —
l.c.l., 5 tons, works....ton.74.75 - —
smaller lots, works..ton.79.75 - —
paper bgs., c.l., works..ton.70.00 - —
l.c.l., 5 tons, works...ton.73.00 - —
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.05 - —
100-lb. lots.....lb. 3.15 - —
cns., 25 lbs.....lb. 3.27 - —
Hydrate, bbls., divd.....lb. .82 - —
Iodide, bots., 5 lbs.....lb. 5.70 - —
jars, 25 lbs.....lb. 5.55 - —
Linoleate, liquid, 4%, dms..lb. .20 - —
solid, precip., 8.2%, bbls...lb. .22 - —
Resinate, fused, 3½%, bbls.. lb. .09 - .10½
precip., dms.....lb. .14½- .15½
Sulphate, anhyd., dms., ton lots, works..lb. .11½- —
single dms., works.....lb. .11½- —
feed grade, 77-80%, bgs., c.l. lb. .06¾- —
l.c.l. .....lb. .06½- —
fertilizer, 65%, $MnSO_4$, bgs., c.l., divd. East.....ton.59.50 - —
l.c.l., bgs., same basis or f.o.b. Balto. and Cincinnati..ton.66.50 - —
industrial grade, 80% $MnSo_4$, c.l..lb. .05 - —
l.c.l. .....lb. .05½- —
Mangrove bark, if, and when, available, bgs.....ton.60.00 - —
Manna flake, large, cs.....lb. No stocks
small, cs.....lb. 3.40 - 3.45
Mannitol,[2] com'l grade, bbls., ton lots, works..lb. .35 - —
smaller lots, works.....lb. .40 - —
reagent grade, 50-lb. cs., or multiples, works..lb. .85 - —
Manure, sheep, bgs., c.l., Midwest shipping points..ton.12.00 -20.00
kiln-dried, bgs., c.l., f.o.b. Chicago..ton.15.00 -25.00
Marjoram,[1] Chilean, bls.....lb. .49 - .50
Gulf port, due May-June, bls., lb. .41½- .42
French, bls.....lb. .84 - 1.15
Tunisian, bls.....lb. .60 - .65
Matico leaves, bls.....lb. .22 - .29
Menthol, natural, cs.....lb.14.50 Nom.
synthetic, USP, cs.....lb.13.00 - —
technical, 60-lb. cs.....lb. 6.00 - —
smaller lots.....lb. 6.50 - —

Menthyl salicylate, tins, 100-lb. lots..lb. 3.00 - —
25-lb. lots.....lb. 3.10 - —
Mercurial ointment, USP, mild, 10%, tubs..lb. .70 - .72
30%, pails.....lb. 1.44 - 1.46
25 lbs.....lb. 1.46 - —
50%, pails.....lb. 2.00 - 2.11
Mercury (see Quicksilver).
Ammoniated (see White precipitate).
Bichloride,[3] (see Corrosive sublimate).
Bisulphate,[3] 5-lb. bots.....lb. 3.02 - —
flb. dms.....lb. 2.89 - 2.91
Chloride[3] (see Calomel).
Cyanide,[3] cryst., powd.....lb. 4.00 - 4.05
Iodide,[3] red, NF, 5-lb. lots..lb. 4.66 - 4.71
100-lb. fib. dms.....lb. 4.60 - —
yellow, 5-lb. bots.....lb. 4.76 - 4.81
flb. dms., 100 lbs.....lb. 4.70 - —
Nitrate ointment (see Citrine ointment).
tech. (see Red, mercury oxide).
Oxide,[3] yellow, tech. (see Yellow, mercury oxide).
NF VI, flb. dms., 50 lbs. or more..lb. 3.35 - —
red,[3] NF (see Red precipitate).
Mercury and chalk,[3] 5-lb. cans.lb. 1.93 - 1.98
dms.....lb. 1.86 - 1.88
Mesityl oxide, dms., c.l., divd.lb. .11½- —
l.c.l., divd.....lb. .12 - —
tanks .....lb. .10½- —
Metal leaf, Japanese, pkgs. of 20 books (500 leaves), aluminums, 5½x5½ in..pkg. 2.50 - —
composition, 5½x5½ in....pkg. 3.00 - —
gold XX, deep, 23K, 3⅜x3⅜ in. pkg.15.00 - —
silver, 3⅜x3⅜ in.....pkg. 3.00 - —
Metanitroparatoluidine, bbls...lb. 1.05 - 1.10
Metaphenylenediamine,[6] kgs...lb. .85 - —
Metatolylenediamine,[6] kgs...lb. .70 - —
Methanol,[1,6] natural, all grades.
E. of Miss. R., dms., c.l. gal. .63 - .66
l.c.l. .....gal. .73 - .76
tanks .....gal. .60 - —

Inside prices on natural methanol are drums extra; outside, drums included.
Methanol prices W. of Miss. R. are 3c. per gal. higher

Methanol, synthetic,[5,6] pure, dms., c.l., Zone 1, frt. alld..gal. .34½- —
2, frt. alld. or divd..gal. .36½- —
3, frt. alld.....gal. .33½- —
4, frt. alld.....gal. .40½- —
l.c.l., Zone 1, frt. alld. or divd..gal. .37 - —
2, frt. alld.....gal. .42¼- —
3, divd., S. F. and L. A.. gal. .41 - —
4, frt. alld. or divd..gal. .42½- .56½
tanks, Zone 1, frt. alld...gal. .28 - —
2, frt. alld.....gal. .30 - —
3, frt. alld.....gal. .32 - —
4, frt. alld.....gal. .32½- —

Synthetic methanol sales zones are:—Zone 1, Conn., Del., D. C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Penn., R. I., S. C., Tenn., Vt., Va., W. Va., Wis.; Zone 2, Ala., Ark., Col., Fla., Ga., Kans., La., Miss., Neb., N. D., Okla., S. D., Tex., Wyo.; Zone 3, Los Angeles, Cal.; San Francisco, Cal.; also (c.l. only) Portland, Ore., and Seattle, Wash.; Zone 4, Ariz., Cal., N. Mex., Mont., Nev., Idaho, Ore., Utah, Wash.

Methyl acetate, C.P., 97-99%, dms., c.l., E. of Miss....lb. .10½- .12
W. of Miss.....lb. .11½- .12
l.c.l., E. of Miss.....lb. .11 - .14
W. of Miss.....lb. .12 - .13½
tanks, divd. E. of Miss..lb. .09½- —
W. of Miss.....lb. .10½- —
tech., dms., c.l., E. of Miss.lb. .08 - .09
l.c.l., E. of Miss.....lb. .07½- .11
W. of Miss.....lb. .07½- .10½
tanks, E. of Miss.....lb. .06 - —
W. of Miss.....lb. .07 - —
Acetoacetate, dms., c.l., works, frt. alld..lb. .29½- —
Acetone, natural, Group A, dms., c.l., E. of Miss., frt. alld..gal. .66 - —
l.c.l., same basis.....gal. .76 - —
tanks, same basis.....gal. .60 - —

Natural methyl acetone quoted dms., included by group A. Prices W. of Miss. R. are 3c. per gal. higher.

Methyl acetone, natural, Group B, dms., c.l., Zone 1, frt., alld..gal. .63 - —
Zone 2, same basis..gal. .65 - —
Zone 3, same basis..gal. .67 - —
Zone 4, same basis..gal. .69 - —
l.c.l., Zone 1, same basis, gal. .66 - —
Zone 2, same basis..gal. .63 - —
Zone 3, same basis..gal. .70 - —
Zone 4, same basis..gal. .68 - —
tanks, Zone 1, same basis, gal. .60 - —
Zone 2, same basis..gal. .62 - —
Zone 3, same basis..gal. .64 - —
Zone 4, same basis..gal. .64½- —

Natural methyl acetone quoted drums extra by Group B, sales Zones are:—Zone 1, Conn., Del., D. of C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Pa., R. I., Tenn., Vt., Va., W. Va., Wisc.; Zone 2, Ala., Ark., Col., Fla., Ga., Kan., La., Miss., Neb., N. D., Okla., S. C., S. D., Tex., Wyo.; Zone 3, Los A., San Fran., Seattle, Wash., Portland, Ore.; Zone 4, Ariz., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash.

synthetic, tanks, Zone 1..gal. .43 - —
Zone 2.....gal. .44½- —
Zone 3.....gal. .45½- —
Zone 4.....gal. .45½- —
dms., c.l., Zone 1.....gal. .51 - —
Zone 2.....gal. .52 - —
Zone 3.....gal. .53½- —
Zone 4.....gal. .54½- —
l.c.l., Zone 1.....gal. .54½- —
Zone 2.....gal. .57 - —
Zone 3.....gal. .58 - —
Zone 4.....gal. .59½- —

Alcohol (see Methanol).
Anthranilate, 100-lb. lots.....lb. 2.20 - 2.50
25-lb. lots, bots.....lb. 2.35 - 2.65
Benzoate, cns., 25 lbs.....lb. .70 - 1.10
Bromide, cns.....lb. .75 - .80
cyls. .....lb. .65 - .75
Chloride, refrigeration, 500 lbs. and up, machine mfrs. and jobbers, cylinders..lb. .32 - —

A Grade For Every Purpose

ST. JOE Lead-Free ZINC OXIDES have been adopted by leading manufacturers in the rubber, paint and allied industries for this reason: The precise characteristics which consumers' requirements indicate as being most desirable for their respective products, can be readily imparted to our various grades. This is due to the flexibility of our patented Electro-Thermic Process, by means of which our zinc oxides are produced.

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250 PARK AVE., NEW YORK, N. Y.

MADE BY THE LARGEST PRODUCER OF LEAD IN THE UNITED STATES

Methyl chloride, refrig., 500 lbs. and up, service men and consumers, cyl..lb. .36 - —
60 to 400 lbs., cyl., mach., mfrs. and jobbers..lb. .26 - —
service men and consumers, cyl..lb. .40 - —
tanks, multi-unit, machine mfrs. and jobbers..lb. .31 - —
service men and consumers, lb. .35 - —

Methyl chloride quotations are spot or contract, for delivery to any common carrier point in United States. Prices above are in 60, 90 and 180-lb. cylinders. Prices on the 20-lb. cylinders are uniformly 10c. per pound higher than above prices.

Methyl, cinnamate, bls.....lb. 1.60 - 4.00
Formate, dms.....lb. .80 - —
Lactate, dms., l.c.l., divd...lb. .70 - —
Iodide, bots.....lb. 4.00 - 4.15
cns.....lb. .37 - .40
Salicylate, dms.....lb. .25 - .27

Methylamyl ketone, dms., works, l.c.l..lb. .25 - —
smaller containers, same basis lb. .28 - —

Methylcellulose, specl, vis. (4,000 cps.), 5lb. ctns., 2,000 lbs. or more, frt. alld..lb. .60 - —
100 to 1,999 lbs., frt. alld. lb. .65 - —
1 to 99 lbs., works....lb. .70 - —
std. vis. (15-1,500 cps.), 2lb. ctns., 2,000 lbs. or more, frt. alld..lb. .53 - —
100 to 1,999 lbs., frt. alld. lb. .58 - —
1 to 99 lbs., works....lb. .63 - —

Methylcyclonexane, 99-100%, dms., works..lb. .16 - —

Methylcyclohexanol, 98-100%, dms., works..lb. .33 - —

Methylcyclohexanone, 98-100%, dms., works..lb. .32 - —

Methylene blue, medicinal, kgs., 100 lbs..lb. 2.00 - —
cns., 5 lbs.....lb. 2.25 - —

Chloride, refrigeration, dms., works..lb. .18 - .22
solvent, dms., works.....lb. .12 - .15

Methylethyl ketone,[6] dms., tech., frt. pd. E. of Rocky Mts..lb. .09 - —
l.c.l., same terms.....lb. .09½- —
tanks, same terms.....lb. .08 - —

Methylhexyl ketone, dms., tech., works..lb. .60 - —

Methylisobutyl ketone, dms., c.l., divd..lb. .12¾- —
l.c.l., divd.....lb. .13 - —
tanks, divd.....lb. .11½- —

Methylnaphthyl ketone, dom., cryst., cns..lb. 3.00 - 3.10

Metronite pigment, 120 mesh, containers extra, c.l., f.o.b. Milwaukee..ton. 9.00 - —
l.c.l., same basis.....ton.11.00 - —
180 mesh, containers extra, c.l., same basis..ton.11.00 - —
l.c.l., same basis.....ton.13.00 - —
250 mesh, containers extra, c.l., same basis..ton.12.00 - —
l.c.l., same basis.....ton.14.00 - —
325 mesh, containers extra, c.l., same basis..ton.15.00 - —
l.c.l., same basis.....ton.17.00 - —
400 mesh, containers extra, c.l., same basis..ton.17.50 - —
l.c.l., same basis.....ton.19.50 - —

Mica, dry grd.,[1] roofing, white, 20 mesh, bgs., c.l., f.o.b. works..ton.27.50 - —
l.c.l.....ton.32.50 - —
30-31 mesh, c.l.....ton.27.50 - —
l.c.l.....ton.32.50 - —
40-45 mesh, c.l.....ton.27.50 - —
l.c.l.....ton.32.50 - —
80 mesh, c.l.....ton.35.00 - —
l.c.l.....ton.38.00 - —

Mica, dry-grd., paint, plastic, 100 mesh, c.l..ton.40.00 - —
l.c.l.....ton.43.50 - —

wet grd.,[1] paint or lacquer, c.l. lb. .04¾- —
l.c.l.....lb. .05½- —
paper, wall, or coated, c.l..lb. .04¾- —
l.c.l.....lb. .05½- —
rubber, c.l.....lb. .04½- —
l.c.l.....lb. .05 - —
biotite, c.l.....lb. .06¾- —
l.c.l.....lb. .04½- —
1,000-mesh, white, c.l.....lb. .05¾- —
l.c.l.....lb. .04½- —
1,000-mesh, biotite, c.l...lb. .03¾- —
l.c.l.....lb. .04½- —

Mica, dry grd., is quoted in bags at the works; wet grd. and 1,000-mesh mica in carload lots is frt. alld. E., and in less than carload lots ex whse. or frt. alld. E. Prices of the wet grd. are ½c. per lb. higher W. of Miss. R. and 1c. per lb. higher W. of Rockies.

Milk powder, skimmed,[1] roller, Zone A, bulk, and quantity, bbls..lb. .13½- —
Zone B, same basis.....lb. .13¾- —
spray, roller, Zone A, same basis..lb. .15½- —
Zone B, same basis.....lb. .15¾- —

Milk powder, skimmed, when sold by manufacturers to the U. S. Government or any agency thereof, is 1c. less than the above prices on skimmed milk powder as sold to any consumer other than the U. S. Government or any agency thereof. Zone A is all states not included in Zone B. Zone B is Penna., N. Y., Md., Del., N. J., Conn., Mass., R. I., N. H., Vt., Me. and D.C.

whole, roller, bbls., c.l.....lb. .29 - —
l.c.l.....lb. .29½- —
spray, bbls., c.l.....lb. .30 - —
l.c.l.....lb. .30½- —

Milk sugar, bbls., c.l.....lb. .25 - —
l.c.l., 10 bbls. or over.....lb. .26 - —
less than 10 bbls.....lb. .27 - —

Millet seed, yellow, bgs.....lb. .04 - .04½
early fortune, bgs.....lb. .04 - .04½
hulled, bgs.....lb. .07 - .13

Mineral spirits (see Petroleum thinners and V. M. & P. naphtha).

Molasses,[1,9] blackstrap, tanks, f.o.b. works, Area 1..gal. .18 - —
Area 2, same basis....gal. .18½- —
Area 3, same basis....ton.20.00 - —
Area 4, same basis....ton.24.20 - —
Area 5, same basis....ton.33.20 - —

Note—Area No. 1 is La., Fla., Tex. and Ga. Area No. 2 is N.Y., Penn., Md., Mass. and N.J. Area No. 3 is Ore., Wash. and Calif. Area No. 4 is Id., Utah, Mont., Colo., Wyo., Kan., S.D. and Neb., excluding Grand Island. Area No. 5 is Ind., Mich., Ohio, Wis., Minn., Ia., and Grand Island, Neb.

Molybdate orange (see Orange, molybdate).

Molybdenum metal,[6] kgs., 99% powd..lb. 2.60 - 3.00
trioxide,[6] pure, kgs., basis Mo. content, works..lb. .95 - —
technical, kgs., basis Mo. content, works..lb. .80 - —

Monoamylamine, dms., basis 100%, c.l., works..lb. .61 - —
l.c.l., works.....lb. .64 - —

Monoamylnaphthalene, l.c.l., dms., works..lb. .17 - —

Monobutylamine, dms., basis 100%, c.l., works..lb. .48 - —
l.c.l., works.....lb. .51 - —

Monoethanolamine,[6] dms., c.l., works..lb. .24 - —
l.c.l., dms.....lb. .25 - —
tanks.....lb. .23 - —

Monoethylamine, basis 100%, dms., c.l., works..lb. .43 - —
l.c.l., works.....lb. .46 - —

Monochlorobenzene, dms., c.l..lb. .06¼- —
55 gals.....lb. .07 - —
10 gals.....lb. .08 - —
5 gals.....lb. .09 - —
tanks.....lb. .05 - —
Monoethylaniline, dms.....lb. .47 - —
Monomethylamine, dms.....lb. .33 - —
Monomethylpara-aminophenol-sulphate, dms..lb. 3.75 - 4.00
Monosodiumphosphate (see Soda phosphate monobasic).

Morphine, bots., 5 ozs.....oz.11.10 - —
cns., 25 ozs.....oz.10.90 - —
Acetate, bots., 5 ozs.....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —
Hydrobromide, 5 ozs.....oz. 8.95 - —
cns., 25 ozs.....oz. 8.75 - —
Hydrochloride, 5-oz. bots....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —
Sulphate, bots., 5 ozs.....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —

Morpholine, dms., 55 gals., l.c.l., works..lb. .67 - —
smaller containers, works....lb. .75 - —

Mullein leaves, cns.....lb. .12 - .18
flowers, cns.....lb. 1.75 - 2.10

Musk, nat., Tonquin, grains, bots. oz.45.00 -50.00
synth, ambrette, cns., 100 lbs. or more..lb. 4.00 - 9.00
25 lbs. to 75 lbs.....lb. 4.10 - 9.10
5 lbs.....lb. 4.25 - 9.45
ketone, cns., 100 lbs. or more, lb. 4.15 - 9.35
25 lbs. to 75 lbs.....lb. 4.25 - 9.35
5 lbs.....lb. 4.40 - 9.70
xylol, cns., 100 lbs. or more..lb. 1.40 - 2.80
25 lbs. to 75 lbs.....lb. 1.50 - 2.60
5 lbs.....lb. 1.65 - 2.90
Musk root, bls.....lb. 2.26 - 2.80

Mustard seed, California, brown, goods, bgs..lb. .17½- .18
Montana, yellow, bgs.....lb. .11¾- .11¾
Washington, yellow, bgs..lb. .11½- .12

Myrobalans,[6] J1, bgs., f.a.s...ton.75.00 - —
J2, bgs., f.a.s.....ton.70.00 - —
Extract, liquid, 25%, bbls...lb. No prices
solid, 50%, bbls.....lb. No prices
powdered, bbls.....lb. No prices

N

Naphtha, Painters (see Petroleum, naphtha, V. M. & P.).
Solvent (see S).

Naphthalene, crude,[6] dom., 74 deg., tanks, works..100 lbs. 2.75 - —
78 deg., tanks, works..100 lbs. 3.00 - —
refined, balls or flakes, bbls., wholesalers and jobbers, f.o.b. works..lb. .06 - —
50-lb. cs., same basis....lb. .06½- —
pkgs. (16-oz.), same basis.lb. .06¾- —
(12-oz.), same basis...pkg. .07 - —

Neocinchophen, USP., 100-lb. lots, dms...lb. 7.00 - —
50-lb. lots.....lb. 7.05 - —
25-lb. lots.....lb. 7.10 - —

Neroiin, cryst., cns.....lb. 1.70 - 2.00

Niacin (see Acid, nicotinic).

Nickel,[6] carbonate, bbls.....lb. .24 - .26½
Chloride,[6] bbls.....lb. .18 - .20
Cyanide,[6] 100-lb. dms.....lb. 1.40 - —
25-lb. bots.....lb. 1.50 - —
Oxide,[6] black, bbls.....lb. .25 - .28
Salt,[6] bbls.....lb. .13 - .13½

Nicotine[2] sulphate, 40%, dms., 50 lbs..lb. .798 - —
tins, 10 lbs.....lb. .90 - —

Nicotinamide,[6] bots., 25 to 100 lbs..lb. 7.00 - 9.14
smaller lots.....lb. 7.10 - 9.24

Niger seed, bgs.....lb. .16 - .16½
Nikethamide.....lb.18.00 -19.00
Nitercake, bulk, works.....ton.16.00 - —
Nitrobenzene, dbl. dist., dms., c.l. lb. .08 - —
l.c.l.....lb. .09 - —
tanks.....lb. .07 - —

Nitrocellulose, ester-soluble, 30-35, ¼-½ sec., bbls., dry weight, l.c.l., works..lb. .26 - —
5-6, 15-20 sec. and higher, bbls., dry weight, l.c.l., works..lb. .25 - —

Nitrocellulose prices are quoted on the basis of dry weight; denatured alcohol used in manufacture is charged extra. Barrels are to be paid for extra, but are returnable.

Nitroethane, dms., l.c.l., wks.lb. .35 - —
Nitrogenous fertilizer material, dom., 16% ammon., bulk, f.o.b. Carrollville, Wis..unit-ton. 2.00 Nom.
Chemical, Ill.....unit-ton. 2.90 - —
Nitromethane, dms., l.c.l., wks. lb. .25 - —
Nitronaphthalene, bbls.....lb. .24 - .26
Nitropropane I, dms., l.c.l., works lb. .25 - —
II dms., same basis.....lb. .25 - —
Nutgalls,[6] Aleppo, bgs.....lb. No prices
Chinese, whole.....lb. .45 Nom.
Extract (see Gall extract).
Nutmeg,[1] E. I., 90's, bgs....lb. .75 Nom.
West Indian, bgs.....lb. .35½ Nom.
Nux vomica, bls.....lb. .09 - .11
powd., bbls., bxs.....lb. .12 - .16

O

Oakbark extract,[6] 25% tan., bbls., c.l., works..lb. .0335- —
tanks.....lb. .0635- —
Ocher (see Yellow)

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Exchange
OIL OF
ORANGE
U. S. P.

Octane,[1] 100-140° C., industrial grade, dms., c.l., G.S. .gal. .15½- —
l.c.l., G.S. .gal. .29 - —
10 gals., G.S. .gal. .55 - —
tanks, G.S. .gal. .13 - —
Octanol, normal, tech., 360-lb. dms., dlvd. .lb. .55 - —
Oil, almond, bitter, artif. (see Benzaldehyde)
natural, USP, bots. .lb. 3.50 - 6.00
sweet, exp., dms., cns. .lb. 1.70 - 2.00
Angelica, root, bots. .lb. 125.00 -140.00
seed, bots. .lb. 120.00 -140.00
Anilin (see A).
Anise, USP, cns., dms. .lb. 3.10 - 3.25
Apricot, kernel, cns. .lb. .38 - .55
Avocado, cns., dms. .lb. .80 - .95
Babassu,[1,5] tanks. .lb. .1110- —
Bay, W. I., 50-55%, cns. .lb. 1.85 - 1.98
Puerto Rican, 55-60%, cns. .lb. 1.65 - 1.90
Bergamot, artif., cns. .lb. 2.25 - 9.85
natural, Italian, coppers .lb. 25.00 Nom.
Brazilian, cns. .lb. 10.00 -10.25
Birch (see Oil, sweet, birch).
Birchtar, crude. .lb. 2.00 - 2.25
rectified, cns. .lb. No stocks
Bois de Rose, Brazil, cns. .lb. 4.25 - 5.75
Mexican (see Lignaloe, wood).
Bone, dms., works. .gal. .65 - .70
Cade, USP IX (see Oil, juniper tar).
Cajeput, tech., dms. .lb. 1.85 - 2.25
free from metal, cns. .lb. 2.00 - 2.10
redistilled, cns. .lb. 2.15 - 2.30
Calamus, cns. .lb. No stocks
Camphor, sassafrassy, cns. .lb. .45 - .55
white, cns. .lb. .80 - .70
dom., tech. .lb. .15 - —
Canangra, native, cns. .lb. 11.75 -16.00
rectified, cns. .lb. 11.25 -17.00
Capsicum (oleoresin), USP VII, cns. .lb. 4.00 - 5.50
Caraway, USP, cns. .lb. 13.75 -17.00
Cardamom, bots. .lb. 24.00 -34.00
Cassia, USP, cns. .lb. 10.50 -12.00
Castor,[1,7] blown, dms., returnable, c.l. .lb. .15¼- —
l.c.l. .lb. .16 - —
cold pressed, USP, bbls., c.l. .lb. .14 - —
l.c.l. .lb. .14½- —
cns. .lb. .15¾- .17¾
dms., returnable, c.l. .lb. .13¾- —
l.c.l. .lb. .14½- —
tanks .lb. .13 - —
dehydrated, dms. .lb. .1800- —
l.c.l. .lb. .1900- —
tanks .lb. .1770- —
extracted, No. 3, tech., bbls., c.l. .lb. .13¾- —
l.c.l. .lb. .14¼- —
dms., returnable, c.l. .lb. .13½- —
l.c.l. .lb. .14¼- —
tanks .lb. .12¾- —
sulphonated, 50% (40% fat), dms., c.l. .lb. .10 - —
l.c.l. .lb. .11 - —
75% (63% fat), dms., c.l. .lb. .12¼- —
75% (63% fat), dms., c.l. .lb. .12¾- —
l.c.l. .lb. .13¾- —
80% (68% fat), dms., c.l. .lb. .12¾- —
l.c.l. .lb. .13¾- —
Cedarleaf, USP, cns. .lb. 1.25 - 1.50
technical, cns. .lb. .90 - 1.10
Cedarwood, Southern, dms. .lb. .65 - .85
Celery, bots. .lb. 25.00 -30.00
Chaulmoogra, USP, cns. .lb. .38 - —
Chinawood (see Oil, tung).
Cinnamon, bark oil, bots. .lb. 25.00 -40.00
leaf oil, dms. .lb. 2.25 - —
Citronella, Ceylon, cns. .lb. 1.10 - 1.15
Java, cns. .lb. 2.25 - 3.00
Clove, makers, USP, cns. .lb. 1.70 - 1.75
Coconut,[1,5] Manila, crude, bulk, c.i.f. .lb. .0835- —
edible, ex tax, dms. .lb. .0985- —
Cod,[5] Newf., dms. .gal. .90 - —
Codliver,[5] med., USP, 50-gal. bbls. or dms. .bbl. 80.00 -88.00
Coriander, bots. .lb. 21.00 -38.00
Corn,[1,5] crude, tanks, works .lb. .12¾- —
refd., bbls. .lb. .15½ Nom.
Cottonseed,[5] cooking, bbls. .lb. .16¾- —
salad, bbls. .lb. .17 - —
Creosote (see C).
Croton, NF, cns. .lb. 3.00 - 4.00
Cubeb, USP, cns. .lb. 4.50 - 6.50
Crude (see Petroleum, crude)
Cumin, bots. .lb. 8.00 -10.00
Cypress, bots. .lb. 12.00 - —
Dagras (see D).
Dillseed, bots. .lb. 6.25 - 8.00
weed, bots. .lb. 5.50 - 6.00
Dip (see D).
Erigeron, cns. .lb. 2.10 - 2.35
Eucalyptus, 70-75%, cns. .lb. .94 - .96
80-90%, cns. .lb. 1.00 - 1.14
Fennel, sweet, cns. .lb. 3.00 - 3.25
Fishliver,[1,5] dms., 6,000 to under 60,000 units per gram—per million units. .14 - —
60,000 to under 200,000 units per gram—per million units. .16 - —
200,000 or more units per gram—per million units. .25 - —
Fuel (see Petroleum, fuel oil).
Gaultheria (see Oil, wintergreen leaf)
Geranium, Algerian, cns. .lb. 14.00 -18.00
Bourbon, cns. .lb. 12.00 -20.00
Turkish (see Palmarosa).
Grapefruit, cns. .lb. 1.90 - 2.05
Ginger, dist., bots. .lb. 21.00 -24.00
Guaiac wood, concrete, bots. .lb. 4.50 - 4.75
Hemlock, cns. .lb. 1.15 - 1.35
Juniper berry, cns. .lb. 9.00 -16.00
wood, tech., cns. .lb. 1.50 - 1.55
Juniper, tar, USP, dms. .lb. 1.35 - 1.40
Lard,[5] common, l, bbls. .lb. .14 - —
extra, No. 1, bbls. .lb. .14¼- —
winter, strained, bbls. .lb. .15 - —
prime, burning, bbls. .lb. .16 - —
prime, med., bbls. .lb. .15¼- —
Laurel, bots. .lb. 5.00 Nom.
Lavandin, cns., 25 lbs. .lb. 5.75 - 7.00
Lavender, flower, French, cns. .lb. 8.25 -16.00
garden, cns. .lb. .55 - .75
spike, Spanish, pure, cns. .lb. 5.25 - 6.75
tech., cns. .lb. 3.50 - 4.50
Lemon, Calif., cns. .lb. 3.25 - —
Messina, coppers, cns. No stocks
Terpeneless .lb. 40.00 -45.00
Uruguay, to arrive, 10 kilo cans .lb. 6.00 - 6.25
Lemongrass, cns., dms. .lb. 1.20 - 1.85
Lignaloe, wood, Mex., cns. .lb. 3.25 - 3.50
Brazilian (see Bois de rose).
Mexican, cns. .lb. 3.25 - 3.50
Lime, dist., Jamaica, cns. .lb. 9.00 -11.50
Mexican, cns. .lb. 7.00 - 7.70
expressed, Jamaica, cns. .lb. 11.00 -12.50
Linseed, raw, dms., c.l. .lb. .1560- —
10 or more .lb. .1580- —
3 to 9 .lb. .1620- —
less than 3 .lb. .1640- —
tankcar .lb. .1520- .1540
tankwagon .lb. .1540- .1560
Boiled linseed oil, .004 over raw.
Lubricating,[1] at refinery, ex tax, California, neutrals, pale, 200-600 vis., 2¼-4, tanks .gal. .07¼- .11
red, 200-900 vis., 4-6½ plus, tanks .gal. .07¼- .11½
Group 3, bright stock, 150-180 vis., 0-25 pour, tanks, gal. .22½- .23
300 vis., 3, 0-10 pour, tanks .gal. .14½- .18
200-280 vis., 3, 15-25 pour, tanks .gal. .15 - .17½
Oil, lubricating, at refinery, stocks, S color, 140-150 vis., 10-25 pour, tanks, gal. .24 - .30
cylinder oils, 600-630 flash, tanks .gal. .16 - .17
600-650 steam ref'd, tanks .gal. .15 - .15½
neutral, 70° F., S color, 150 vis., 0-25 pour, tanks .gal. .21 - .24
200 vis., 0-25 pour, tanks .gal. .23 - .26
Mace, dist., cns., dms. .lb. 4.50 - 6.50
Mandarin, Brazilian, cns. .lb. 6.75 - 9.00
Italian, coppers .lb. 15.10 - —
Menhaden,[1,5] crude, tanks, Balto. .lb. .0880- —
ref'd, alkali, dms. .lb. .1270- .1290
kettle-bodied, dms. .lb. .1370- .1390
light-pressed, dms. .lb. .1170- .1190
tanks .lb. .1090- —
Mineral, white (see Oil, white mineral).
Mustard, artif., USP, cns. .lb. 1.60 - 1.70
seed,[5] exp., dms. .lb. .13½- —
Neatsfoot,[4] 15°, c.l., bbls. .gal. 1.90 - —
20° bbls. .gal. 1.80 - —
30° bbls. .gal. 1.60 - —
pure bbls. .lb. .15¼ Nom.
Neroli, bots. .lb. 300.00 -375.00
Nutmeg, dist., cns., dms. .lb. 4.50 - 6.50
Olticica,[1,6] liquid, dms. .lb. .25 - —
solid, dms. .lb. .25 - —
Oleo,[5] l, bbls. .lb. .13¾ Nom.
Olibanum, bots. .lb. 4.50 - 5.00
Olive,[1,5] denat., dms. .gal. 4.10 - 4.20
edible, Calif., dms. .gal. 4.60 - 4.90
imported, dms. .gal. 5.21 - 5.51
foots, dms. .lb. .19 Nom.
sulphonated, 50% (40% fat), dms., c.l. .lb. No prices
l.c.l. .lb. No prices
35% (68% fat), dms., c.l. .lb. No prices
l.c.l. .lb. No prices
80% (68% fat), dms., c.l. .lb. No prices
l.c.l. .lb. No prices
Oil, orange, sweet, dist., cs. .lb. 1.00 - —
expressed, Argentine, 10-kilo cns. .lb. 2.50 - 2.75
Brazilian, cns. .lb. 1.20 - 1.25
Calif., cns. .lb. 2.25 - —
Florida, cns., dms. .lb. 1.30 - 1.35
Messina, USP, coppers .lb. No stocks
Mexic'n, sponge-press, cns. .lb. 5.50 - 5.75
West Indian, cns. .lb. 5.00 - 5.50
sesquiterpeneless, bots. .lb. 195.00 - —
Origanum, Spanish, cs. .lb. 2.40 - 3.25
Palm,[1,5] Niger, bulk, c.i.f. .lb. .0825- —
Palmarosa, cns. .lb. 4.85 - 6.25
Paraffin,[1] 320° flash, 60-70 vis., tanks, G.S. .gal. .05½- —
350° flash, 70-80@100 vis., 0/10 pour .gal. .06 - —
100-100 vis., 0/10 pour .gal. .06½- —
100-100 vis., 10/25 pour .gal. .06¼- —
80-85 vis., bbls., extra, ind. refy. .gal. .12 - —
100-105 vis., bbls., extra, ind. refy. .gal. .14 - —
300° flash, 100-110 vis., tanks, G.S. .gal. .05¾- —
Patchouli, cns. .lb. 6.45 - 8.00
Peanut,[1,5] crude, tanks, mill. .lb. .13 - —
refd., edible, bbls. .lb. .16½ Nom.
Pennyroyal, dom., cns. .lb. 3.00 - 3.10
import, cns. .lb. 2.50 - 3.00
Peppermint, natural, dms. .lb. 5.50 - 5.75
redist., USP, cns., dms. .lb. 5.50 - 6.25
Perilla,[1,5] crude, dms. .lb. .2450- —
Petitgrain, Paraguay, cns. .lb. 1.75 - 2.00
dms. .lb. 1.70 - 1.95
Pimento berry, cns. .lb. 8.00 - 8.75
leaf, cns. .lb. 4.75 - 5.25
Pine, tanks, works .gal. .55 - —
Pineneedle, Siberian, cns. .lb. 3.00 - 3.25
Putty,[2] bbls., E. Segundo, Richmond, Cal. .gal. .22¾- —
contracts .gal. .19½- —
dms., c.l., Whiting Ind. .gal. 9.24 - —
Boston, Providence .gal. .25 - —
l.c.l., same basis .gal. .27 - —
tanks, same basis .gal. .18 - —
Oil, putty, bbls., Martinez, Cal., gal. .28 - —

[2] Extra for bbls. but subject to quantity discounts, ranging from 2c. to 5c. per gallon, according to amount purchased.

Rapeseed,[1,5] denat., bulk, c.i.f. .lb. .1150- —
Red,[5] dms., dlvd. .lb. .13¼- .14¼
tanks, dlvd. .lb. .12½- —
Rose, natural, coppers .oz. 15.00 -35.00
Rosemary, Spanish, cns. .lb. 1.60 - 2.25
dms. .lb. 1.50 - 2.25
Rosin, 1st rectified, dms. .gal. .60 - —
2d rectified, dms. .gal. .62 - —
3d rectified, dms. .gal. .66 - —
Rue, bots. .lb. 7.50 -13.50
Sage, Spanish, cns. .lb. 3.50 - 3.75
Sandalwood, NF, dist., cns. .lb. 5.25 - 5.50
Mysore, cns., case lots .lb. 7.00 - 7.25
Sardine, crude,[1,5] tanks, Pac. Coast. .lb. .0690- —
ref'd, alkali, dms. .lb. .1270- .1290
kettle-bodied, dms. .lb. .1370- .1390
light-pressed, dms. .lb. .1170- .1190
tanks .lb. .1090- —
Sassafras, artif., cns. .lb. 2.00 - 2.25
natural, cns., dms. .lb. 1.95 - 2.40
Savin, cns. .lb. 16.00 -25.00
Savory, cns. .lb. 8.00 - 8.25
Sesame,[1,5] tanks. .lb. .1450- —
Shingle, st'n, bbls., c.l., works, gal. .19 - —
l.c.l., works .gal. .20 - —
tanks, works .gal. .14 - —
Snakeroot, Canada, cns. .lb. 12.75 - —
Soybean,[1,5] cr., tank, mill. .lb. .1175- —
clarif., dms. .lb. .1290- .1340
tanks .lb. .1250- —
refd., varnish, dms. .lb. .1380- .1400
tanks .lb. .1340- —
Spearmint, dms. .lb. 3.00 - 3.50
Sperm,[6] bleach, 38°, dms. .lb. .1442- —
natural, 45°, dms. .lb. .1310- —
Spruce, cns., dms. .lb. 1.15 - 1.40
Sunflower,[1,5] tanks. .lb. .1450- —
Sweet birch, North, cns. .lb. 4.75 - 6.00
South, cns. .lb. 2.50 - 4.75

Available

PRODUCTS

Products which are available to the perfumer at reasonable prices.

Oil of Cedar Leaf American Pure
Exceptionally Fine Quality
Oil of White Cedar
II Distilled
III Distilled
Oil of Petitgrain South American 46% Ester
Linalyl Acetate
Linalool
Oil of Rosewood Brazilian
Ionone A. B.
Ionone Methyl
Aubepine
Para Cresyl Ethyl Ether
Para Cresyl Methyl Ether
Phenyl Ethyl Alcohol
Cyclamal
Indol
Oil of Balsam Fir American
Oil of Pine Needles American
Oil of Juniper Leaves American
Phenyl AcetAldehyde DiMethyl Acetal
Methyl Naphthyl Ketone, Crystals, Liquid
Alpha Amyl Cinnamic Aldehyde
Ethyl Methyl Phenyl Glycidate
Hydratropic Aldehyde

Requests for samples on your firms letterhead and further information will be promptly furnished

Aromatics Division

GENERAL DRUG COMPANY

644 Pacific St., Brooklyn, N. Y.

9 S. CLINTON STREET, CHICAGO 1019 ELLIOTT STREET, W., WINDSOR, ONT.

Oil, tall, crude, dms., c.l., works, ton 55.00 - —
l.c.l., works ton 60.00 - 65.00
tanks, works ton 40.00 - —
refined, dms., c.l., works .lb. .05 - —
l.c.l., works .lb. .05½ - —
tanks, works .lb. .04½ - —
Tallow,[4] acidless, bbls .lb. .14½ - —
tanks .lb. .13¾ - —
Tansy, cns .lb. 3.00 - 4.00
Tar, pine, dms., E. cities .gal. .30 - .33
tanks .gal. .24¼ - —
rect., USP, bbls .gal. .60 - —
Tar acid (see C).
Thyme, NF, red, cns .lb. 2.50 - 4.00
white, cns .lb. 2.85 - 4.75
Tung,[4,6] dms .lb. .39 - —
tanks .lb. .38¾ - —
Turkey red (see Castor, sulphonated).
Turpentine (see T).
Vetiver, Java, botz .lb. 25.00 - 40.00
Whale,[5] ref., natural, dms .lb. .1187 Nom.
winter, bleach, dms .lb. .1232 Nom.
Wheat germ, dms., 100-gal. .gal. 10.00 - —
25-gal. .gal. 12.50 - —
10-gal. .gal. 13.50 - —
White, mineral, tech., 50-65 vis., returnable, dms., c.l. .gal. .36 - —
l.c.l. .gal. .42 - .45
66/75 vis., c.l. .gal. .36 - —
l.c.l. .gal. .42 - .45
USP, 50/90 vis., dms., c.l. .lb. .39 - —
l.c.l. .gal. .45 - .48
90/105 vis., dms., c.l. .gal. .44½ - —
l.c.l. .gal. .50½ - .53½
125/135 vis., dms., c.l. .gal. .49 - —
l.c.l. .gal. .55 - .58
145/155 vis., dms., c.l. .gal. .51 - —
l.c.l. .gal. .57 - .60
175/185 vis., c.l. .gal. .54½ - —
l.c.l. .gal. .60½ - .63½
200/210 vis., c.l. .gal. .58 - —
l.c.l. .gal. .64 - .67

Oil, white, mineral, U.S.P., 320/330 vis., c.l. .gal. .63 - —
l.c.l. .gal. .71 - .74
335/345 vis., c.l. .gal. .66 - —
l.c.l. .gal. .72 - .75
f.o.b. San Francisco, 55 vis., returnable bbls., c.l. .gal. .40 - —
5 bbls. .gal. .45 - —
85 vis., c.l. .gal. .40 - —
5 bbls. .gal. .45 - —
100 vis., c.l. .gal. .49½ - —
5 bbls. .gal. .46 - —
145 vis., c.l. .gal. .57 - —
5 bbls. .gal. .53 - —
180 vis., c.l. .gal. .60½ - —
180 vis., 5 bbls .gal. .65½ - —
340 vis., c.l. .gal. .72 - —
5 bbls .gal. .77 - —
Russian .gal. No prices
Wintergreen, Nortn, cns .lb. 5.50 - 8.50
South, cns .lb. 4.00 - 5.25
synth. (see Methyl salicylate).
Wood (see Oil, chinawood).
Wormseed, cns .lb. 2.85 - 3.00
Wormwood, cns .lb. 4.25 - 5.00
Ylang-ylang, Bourb., bots .lb. 20.00 - 28.00
Manila, bots .lb. 40.00 - 45.00
Oleostearin,[4] bbls .lb. .1054 - —
Olivine, aggregate, c.l., mines, ton 7.00 - 11.00
lumps, same basis ton 7.00 - —
spalls, same basis ton 5.00 - —
crushed, 8 mesh, bulk, c.l., works ton 8.00 - —
paper bgs., c.l., works ton 9.50 - —
325 mesh, c.l., mines ton 20.00 - —
200 mesh, c.l., mines ton 17.00 - —
100 mesh, c.l., mines ton 15.00 - —
20 mesh to dust ton 12.00 - —
Opium gum, USP, cns, 50-lb. lots .lb. 13.00 - —
25-lb. lots, cns .lb. 13.25 - —
Prices on powd. and gran. USP opium are $1.50 per pound higher.
smaller lots, cns .lb. 13.50 - 13.65

Orange, Lake, Persian,[1] bbls .lb. .30 - .45
Mineral, Amer., bbls., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash .lb. .12¼ - —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash .lb. .12¾ - —
Colo., Mont., N. M., Wyo .lb. .12½ - —
dlvd. other points .lb. .12 - —
smaller lots, dlvd. Ala., etc .lb. .12¾ - —
Ariz., etc .lb. .13¼ - —
Colo., Mont., N.M., Wyo. .lb. .13 - —
Other points .lb. .12½ - —
Orthonitroaniliin toner,[2] kgs., works .lb. .80 - —
dinitroanilin toner,[1] same basis .lb. 1.05 - —
Molybdate,[1] bbls .lb. .31 - —
Toner, bbls .lb. .80 - .105
Orangeflower petals, cs .lb. .45 - .75
Orange peel, bitter, bbls .lb. .30 - .31
Haitian, bgs .lb. .09 - .10
sweet, bls .lb. .17 - .20
Oregano, Mexican, bgs .lb. .15½ - .16
Orris root, African, bls .lb. 1.00 - 1.05
powd., bbls., bxs .lb. 1.12 - 1.15
Portuguese, bls .lb. .45 - .46
Verona, bls .lb. 1.25 - 1.30
Orthoamylphenol, l.c.l., dms., works .lb. .25 - —
Orthoanisidin, bbls .lb. .70 - —
Orthochloroanilin, dms .lb. .60 - .70
Orthochlorophenol, dms .lb. .32 - —
Orthocresol,[6] 30.4° C. Min. M. P., dms., c.l., works .lb. .17½ - .18
l.c.l., same basis .lb. .18 - .18½
Orthocresol, 29° Min. M. P., dms., c.l., works .lb. .16½ - .17
l.c.l., same basis .lb. .17 - .17½
Orthodichlorobenzene, dms., c.l., works, frt. alld. E. of Rockies .lb. .06 - .07½
l.c.l., same basis .lb. .07 - .08½
100-lb. tins, same basis .lb. .08 - .09
50-lb. tins, same basis .lb. .09 - .10
tanks, same basis .lb. .06½ - .06½
Orthodichlorobenzene prices west of Rockies 1c. per lb. higher.
Orthonitroanilin, dms .lb. .45 - —
Orthonitrochlorobenzene, dms .lb. .15 - .18
Orthonitroparachlorophenol, cns .lb. .75 - —
Orthonitrotoluene, dms .lb. .09 - —
Orthophenetidin, dms .lb. .82 - —
Ortho-toluidin, dms .lb. .19 - —
Osage orange, crystals, bbls .lb. .23 - —
extract, bbls., No. 1, bbls .lb. .11 - —
No. 2, bbls .lb. .10 - —
Oxyquinolin sulphate, cns., 100 lbs., works .lb. 3.50 - —
smaller lots, bots., cns .lb. 3.75 - 4.15

P

Papain, powd., cs .lb. 3.65 - 3.75
Long Beach, Calif., contract .lb. 3.25 - 4.00
Paprika,[1] Portuguese, extra fancy, bgs .lb. .36½ - .37
good, old crop, bgs .lb. .33 - .34
Spanish, extra fancy, bgs .lb. .51 - .52
good, bgs .lb. .39 - .40
medium, bgs .lb. .34 - .35
Parachlorophenol, dms., wks .lb. .32 - —
Paracymene, refd., dms .gal. .75 - 1.25
Paradichlorobenzene, dms., c.l., works .lb. .11 - .13
l.c.l., same basis .lb. .12½ - .15
Paraffin, crude scale, white or yellow, 122-124 AMP, bbls., c.l., refinery .lb. .04¼ - —
124-126 AMP, bbls., same fully ref'd. slabs, loose, 120-122 AMP, c.l., refinery .lb. .05 - —
123-125 AMP, same basis, lb. .0520 - —
125-127 AMP, same basis, lb. .0520 - —
128-130 AMP, same basis, lb. .0560 - —
130-132 AMP, same basis, lb. .0585 - —
131-133 AMP, same basis, lb. .0585 - —
133-135 AMP, same basis, lb. .0615 - —
135-137 AMP, same basis, lb. .0640 - —
138-140 AMP, same basis, lb. .0715 - —
143-145 AMP, same basis, lb. .0810 - —
149-151 AMP, same basis, lb. .1050 - —
Prices in bags 0.40c. per lb. higher than those for slabs loose.
Paraformaldehyde,[2,3] dms., 1,000 lbs. or more, works .lb. .23 - —
100 to 900 lbs., works .lb. .24 - —
Paranitropheno! kgs .lb. .35 - —
Paraldehyde, tech., 98%, 55 and 110-gal. dms., c.l., works .lb. .12 - —
5 and 10-gal. dms., works .lb. .15 - —
USP, cns., cbys .lb. .35 - .45
Paranisidine, dms., works .lb. .75 - —
Paranitroanilin, kgs., works .lb. .45 - —
Paranitrochlorobenzene, kgs., works .lb. .15 - —
Paranitrotoluene, kgs., works .lb. .30 - —
Paraphenylenediamine, bbls., works .lb. 1.25 - 1.30
Paratoluenesulphonamide, bbls .lb. .70 - —
Paratoluidin, bbls., works .lb. .48 - —
Pareira brava root, bls .lb. .21 - .27
Paris green,[1] dealer, dms., kgs., c.l., works, frt. alld .lb. .20 - .25
l.c.l., same basis .lb. .21 - .26
Passion flower, herb, bls .lb. .10 - .11
Patchouli leaves, bls .lb. .35 - .40
Pectin, 200-lb. bbls .lb. .80 - —
Pellitory root, bls .lb. .65 - .70
Pennyroyal leaves, bls .lb. .15 - .16
Pentachlorophenol, dms., works, lb. .20 - .25
Pentaerythritol,[6] CP, bbls., dlvd., lb. .75 - —
less than barrel lots .lb. 1.00 - —
tech., bbls., dlvd .lb. .33½ - .35½
less than barrel lots .lb. .40 - —
Tetra acetate, bbls., dlvd .lb. 1.00 - —
less than barrel lots .lb. 1.50 - —
Pentane,[1] 28°-38° C., industrial grade, dms., c.l., G.3 .gal. .11 - —
l.c.l., G.3 .gal. .19 - —
tanks, G.3 .gal. .07½ - —
laboratory grade, dms., c.l., G.3 .gal. .16 - —
l.c.l., G.3 .gal. .29 - —
10 gal., G.3 .gal. .55 - —
Pepper, black,[1] 15 tons, bgs .lb. .0665 - .0675
50 to 100 bgs .lb. .0705 - .0715
White,[1] 15 tons, bgs .lb. .1161 Nom.
24 bgs .lb. .1295 Nom.
Red, chillies, Carolina, longs, bgs .lb. .21 - .21½
Louisiana, sports, bgs .lb. .21 - .22
Mombassa, bgs .lb. .22½ - .23
Sierra Leone, bgs .lb. .22½ - .23
Taganika, bgs .lb. .21 - .21½
Peppermint, USP, bls .lb. .45 - .50
import, bls .lb. .96 - 1.10
Perchlorethylene,[2] dms., c.l., works, frt. alld., Zone 1 .lb. .0782 - .0800
l.c.l., same basis .lb. .0832 - .0850
Zone 2, dms., c.l., works, frt. alld .lb. .0832 - .0850
l.c.l., same basis .lb. .0882 - .0900

Perchlorethylene, Zone 3, dms., c.l., works, frt. equald .lb. .0882 - .0900
l.c.l., same basis .lb. .0932 - .0950
Zone 4, dms., c.l., f.o.b. stock point .lb. .0882 - .0900
l.c.l., same basis .lb. .0932 - .0950
Perchlorethylene zones are:—(1) Conn., Del., Ill., Ind., Ia., Ky., Me., Md., Mass., Mich., Minn., Mo., N.J., N.Y., N.C., Ohio, Pa., R.I., Tenn., Vt., Va., W.Va., Wis., Omaha, K.C., Kan.; (2) Ala., Ark., Fla., Ga., Kan., La., Miss., Neb., N.D., Okla., S.C., S.D.; (3) Col., Mont. (E), N.M., Tex., Wyo; (4) Ariz., Cal., Ida., Mont. (W), Nev., Ore., Utah, Wash.
Peru balsam, dms .lb. 1.25 - 1.30
Petrolatum, USP, amber, fiber dms., non-returnable .lb. .03¾ - —
l.c.l. .lb. .04¾ - —
extra amber, c.l. .lb. .03¾ - —
l.c.l. .lb. .04¾ - —
cream, c.l. .lb. .04¾ - —
l.c.l. .lb. .06¼ - —
yellow, soft, c.l. .lb. .03¾ - —
l.c.l. .lb. .04¾ - —
white, lily, c.l. .lb. .05½ - —
l.c.l. .lb. .07 - —
snow, c.l. .lb. .06¼ - —
l.c.l. .lb. .07¾ - —
soft, c.l. .lb. .06¼ - —
l.c.l. .lb. .06¼ - —
tech., dark, bbls., returnable, c.l., Group 3 .lb. .021 - —
golden topaz, c.l. .lb. .032 - —
l.c.l. .lb. .036 - —
red, veterinarian, c.l. .lb. .024 - —
l.c.l. .lb. .028 - —
Petroleum, crude, bulk, at wells, California, heavy grades .bbl. .93 - 1.01
Illinois .bbl. 1.37 - —
Kentucky, Union County .bbl. 1.32 - 1.37
Louisiana-Arkansas .bbl. .86 - 1.36
Oklahoma-Kansas .bbl. .75 - 1.25
Pennsylvania .bbl. 1.31 - 3.00
Texas, East .bbl. 1.25 - 1.43
West .bbl. .70 - 1.12
Wyoming .bbl. 1.12 - —
Ether, laboratory grade, 30-60° C., dms., c.l., Group 3, gal. .18 - —
l.c.l. .gal. .29 - —
10 gals .gal. .55 - —
35-60° C., c.l. .gal. .29 - —
10 gals .gal. .55 - —
40-75° C., c.l. .gal. .16 - —
l.c.l. .gal. .29 - —
10 gals .gal. .55 - —
Fuel oil, at refinery:—
Arkansas, No. 1, tanks .gal. .04 - —
Nos. 2 and 3 .gal. .03½ - —
California, heavy .bbl. 1.10 - 1.20
light .bbl. .90 - .95
diesel, tanks .gal. .03 - .05
Group 3, No. 3, tanks .gal. .03½ - —
No. 5 .bbl. .85 - —
No. 6 .bbl. .80 - .85
Kansas, No. 6 .bbl. .85 - .90
Oklahoma, No. 3, tanks .gal. .03½ - —
No. 6 .bbl. .90 - —
14-16 .bbl. .97 - —
Pennsylvania, No. 1, tanks, gal. .06½ - .06¾
No. 2, tanks .gal. .06¾ - .07¼
No. 3, tanks .gal. .06¾ - .07¼
36-40 gravity, tanks .gal. .06¾ - .06¾
Bunker fuel oil, New York .bbl. 1.65 - —
Philadelphia .bbl. 1.65 - —
Portland, Me .bbl. 1.65 - —
Boston, Mass .bbl. 1.65 - —
Charleston, Mass .bbl. 1.60 - —
Savannah, Ga .bbl. 1.60 - —
Norfolk, Va .bbl. 1.65 - —
Providence, R. I .bbl. 1.65 - —
Baltimore, Md .bbl. 1.65 - —
Jacksonville, Fla .bbl. 1.60 - —
Port Tampa, Fla .bbl. 1.55 - —
New Orleans, La .bbl. .85 - —
Port Arthur, Tex .bbl. .85 - —
Houston, Tex .bbl. .85 - —
Texas City .bbl. .85 - —
Lacquer diluent, at refinery:—
California, 100 l.b.n., 200 e.p., tanks, dlvd., Los Angeles, gal. .11 - —
Fort Wells, Wash .gal. .12 - —
San Francisco .gal. .11½ - —
Willbridge, Ore .gal. .12 - —
East Coast, N. J., N. Y., tanks .gal. .11 - —
Group 3, benzol type, tank-cars .gal. .07¾ - —
toluol type, tanks .gal. .07¾ - .07¼
Mineral spirits, at refinery, California (f.o.b. San Francisco), 163-252 b.r., tanks, gal. .10½ - —
198-290 b.r., tanks .gal. .10¾ - —
246-397 b.r., tanks .gal. .10¾ - —
312-408 b.r., tanks .gal. .09 - —
362-458 b.r., tanks .gal. .09 - —
East Coast, N. Y., tanks, gal. .10 - —
N. J., tanks .gal. .10 - —
Group 3, tanks .gal. .06½ - —
Gulf Coast, tanks .gal. .06½ - —
tankwagon, Baltimore, 25-100 gals .gal. .13 - —
100 gals. or more .gal. .12 - —
Boston .gal. .12 - —
Bridgeport, Conn .gal. .1630 - —
Buffalo .gal. .1240 - —
Camden, N. J .gal. .11 - —
Chicago .gal. .13½ - —
Detroit .gal. .1580 - —
Hartford .gal. .1680 - —
Kansas City, Mo .gal. .1480 - —
Lancaster, Pa .gal. .12 - —
Milwaukee .gal. .1440 - —
Minneapolis .gal. .1420 - —
Newark (200 gal.) .gal. .11 - —
New York (200 gal.) .gal. .11 - —
Philadelphia .gal. .11 - —
Pittsburgh .gal. .129 - —
Providence .gal. .13 - —
Rochester .gal. .1320 - —
St. Louis .gal. .1370 - —
Syracuse .gal. .14 - —
Washington, D. C .gal. .13 - —
Wilmington, Del .gal. .13 - —
Naphtha, cleaners, at refinery:—
California (f.o.b. San Francisco), tanks .gal. .12 - —
East Coast, N. Y., tanks-cars .gal. .11 - —
N. J., tankcars .gal. .11 - —
Group 3, tankcars .gal. .07½ - —
Gulf Coast (f.o.b. New Orleans), tankcars .gal. .06¾ - —
tankwagon, Boston .gal. .13 - —
Bridgeport .gal. .1730 - —
Chicago .gal. .1380 - —
Detroit .gal. .15 - —
Milwaukee .gal. .1440 - —
Minneapolis .gal. .1420 - —
Newark .gal. .12 - —
New York .gal. .12 - —
Philadelphia .gal. .125 - —
St. Louis .gal. .1470 - —
high-solvency, aromatic, No. 1,[8] over 70% arom., tanks, f.o.b. Bayway, N.J. .gal. .21½ - —
No. 2,[8] over 90% arom., same basis .gal. .21½ - —
No. 3, same basis .gal. .22½ - —
No. 8,[8] tanks, same basis, gal. .228 - —
No. 30,[8] tanks, f.o.b. Kingsland, N.J., frt. alld .gal. .228 - —
No. 40, tanks, f.o.b. Wilmington, Cal .gal. .13½ - —

LOOK TO THIS LABEL
FOR YOUR ASSURANCE OF
Quality Leadership

● Leadership such as CALCO enjoys in the field of pharmaceutical products is no happenstance. It is a leadership that grows out of rigid, top standards of merit. That is why, for dependability and unswerving quality, large commercial users of these products have long since found it wise to call upon CALCO first. From superbly equipped laboratories throughout every step to large volume production, CALCO pharmaceuticals are checked with infinite care . . . a care undiminished and unrelaxed even in these warrushed days of precedent . . . setting high production goals.

SULFAPYRIDINE U.S.P. (and Sodium Monohydrate)
Nicotinamide U.S.P.
Nikethamide
Sulfanilamide U.S.P.
Cinchophen N. F.
Neocinchophen U.S.P.

SULFATHIAZOLE U.S.P. (and Sodium Monohydrate)
Mandelic Acid U.S.P.
Methylene Blue U.S.P. (Powder—Crystals)
Calcium Mandelate U.S.P.
Glutamic Acid HCL
Aminoacetic Acid U.S.P.
Calcium and Sodium Pantothenate
2-Methyl-1, 4 Naphthoquinone
PHENOTHIAZINE (For Veterinarian Use)

Certified Colors for Pharmaceutical and Cosmetic Use

Pharmaceutical Department
CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
BOUND BROOK Calco NEW JERSEY

New Products REPORT

New Products Report 5 New Phosphates with Interesting Possibilities

Here are five new phosphates with interesting possibilities as yet unexplored. Four seem to have definite utility in glass, chinaware, porcelains and enamels. One is an excellent source of calcium and phosphorus for mineral enrichment of foods.

While only one of these phosphates is available as yet in commercial quantities the others could be placed in quantity production if sufficient demand develops. For experimental samples, write to: MONSANTO CHEMICAL COMPANY, Phosphate Division, St. Louis, Missouri.

ALUMINUM METAPHOSPHATE $Al(PO_3)_3$

PHYSICAL PROPERTIES:

Molecular Weight: 263.91
Appearance: White crystalline powder.
Melting Point: Above 1700°C.
Solubility: Insoluble in water. Practically insoluble in acids.

SUGGESTED USES:

As a constituent of glasses, chinaware and porcelains.

AVAILABILITY:

Available in limited quantities.

BARIUM METAPHOSPHATE BaP_2O_6

PHYSICAL PROPERTIES:

Molecular Weight: 295.40
Appearance: White crystalline powder.
Melting Point: Red heat (about 850°C).
Solubility: Insoluble in water.

SUGGESTED USES:

1. As an opacifying agent in glazes.
2. As a constituent in special types of glass.

AVAILABILITY:

Limited quantities available for experimental investigation.

CALCIUM MAGNESIUM PYROPHOSPHATE $Ca_2Mg_2(P_2O_7)_2$

PHYSICAL PROPERTIES:

Molecular Weight: 476.88
Appearance: Grey powder.
Solubility: Insoluble in water. Soluble in acids.
Grade: Technical.

SUGGESTED USES:

In ceramic industry as a constituent of porcelains and enamels.

AVAILABILITY:

Limited quantities available for experimental investigation.

CALCIUM PYROPHOSPHATE $Ca_2P_2O_7$

PHYSICAL PROPERTIES:

Molecular Weight: 254.20
Appearance: White, non-gritty powder.
Odor: None.
Taste: None.
Melting Point: 1230°C.
Density: 36 to 37 lbs. per cu. ft.
Solubility: Insoluble in water. Soluble in acids.

SUGGESTED USES:

As a source of calcium and phosphorus in mineral enrichment of foods.

AVAILABILITY:

Commercially available in 100-lb. kegs and 200-lb. barrels.

MAGNESIUM PYROPHOSPHATE $Mg_2P_2O_7$

PHYSICAL PROPERTIES:

Molecular Weight: 222.68
Appearance: White crystalline powder.
Melting Point: 1383°C.
Solubility: Insoluble in water. Soluble in acids.

SUGGESTED USES:

As a constituent of porcelains and enamels.

AVAILABILITY:

Limited quantities available for experimental investigation.

"E" FOR EXCELLENCE—The Army-Navy "E" burgee with two stars, "representing recognition by the Army and the Navy of especially meritorious production of war materials" over a two-year period flies over Monsanto.

MONSANTO CHEMICALS
SERVING INDUSTRY...WHICH SERVES MANKIND

Petroleum, naphtha, V.M.&P., at refinery:—
California, 46.5, 254 i.b.p., 380 e.p., tanks, f.o.b. El Segundo.gal. .11 - —
Richmond .....gal. .11½- —
Willbridge, Ore., Ft. Wells, Wash..gal. .12 - —
54-77, 190 i.b.p., 310 e.p., tanks, dlvd. Los Angeles..gal. .10 - —
San Francisco....gal. .10½- —
Portland, Seattle.gal. .11 - —
East Coast, N. J., N. Y., tanks..gal. .11 - —
Group 3, tanks.....gal. .07½- —
Gulf Coast (dlvd. New Orleans), tanks..gal. .06½- —
tankwagon, Boston.....gal. .13 - —
Chicago .....gal. .1380- —
Detroit .....gal. .15 - —
Milwaukee .....gal. .1540- —
Minneapolis .....gal. .1520- —
Newark (200 gal.)...gal. .125 - —
New York.....gal. .12 - —
Philadelphia .....gal. .125 - —
Pittsburgh .....gal. .12½- —
St. Louis.....gal. .1470- —

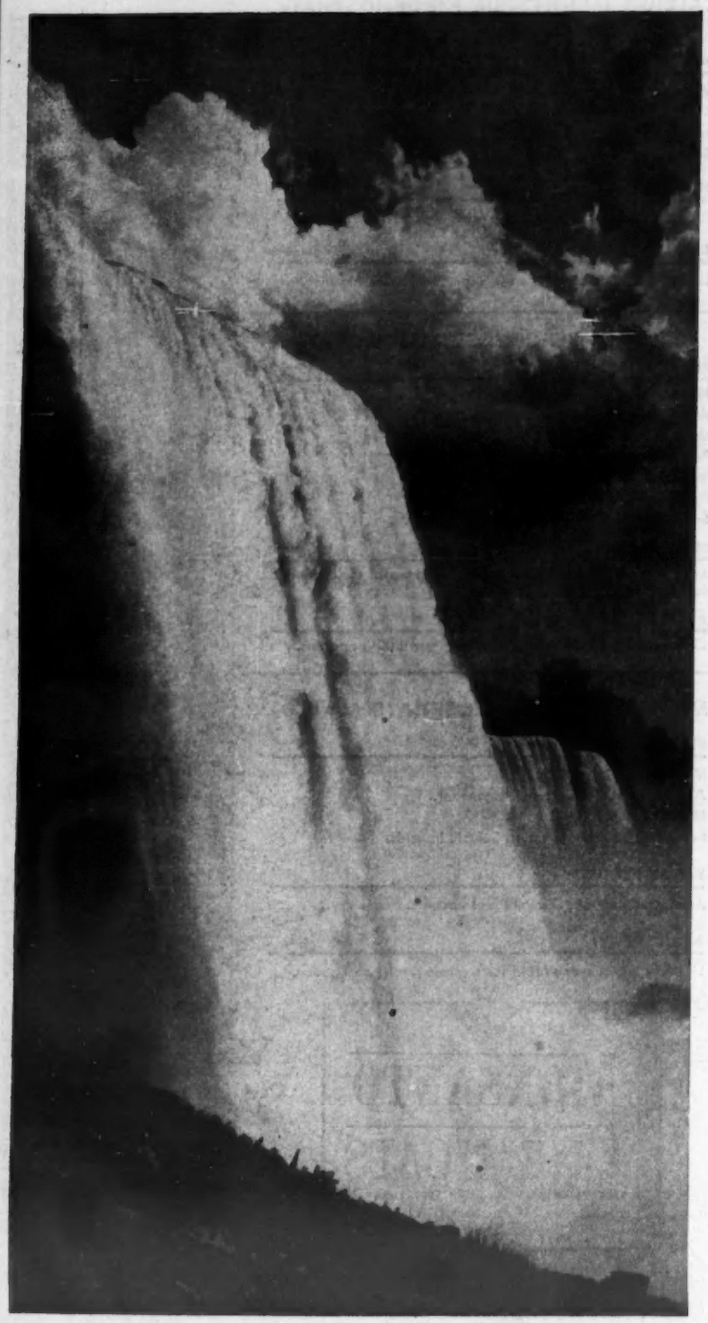
Solvent, rubber, at refinery,
California (f.o.b. San Francisco)..gal. .24 - —
East Coast, N. J., N. Y., tanks..gal. .11 - —
Group 3, tanks.....gal. .07½- .07½

Stoddard (CS 8-33), at refinery:—
California (f.o.b. San Francisco), tanks..gal. .11 - —
East Coast, N. J., N. Y., tanks..gal. .09½- —
Group 3, tanks.....gal. .09⅝- —
tankwagon, Baltimore...gal. .13 - —
Boston .....gal. .12 - —
Chicago .....gal. .13½- —

Petroleum solvent, Stoddard, tankwagon:—
Detroit .....gal. .1580- —
Milwaukee .....gal. .1440- —
Minneapolis .....gal. .1420- —
Newark .....gal. .11 - —
New York.....gal. .11 - —
Philadelphia .....gal. .11 - —
Pittsburgh .....gal. .12½- —
St. Louis.....gal. .1370- —
Syracuse .....gal. .14 - —
Phenobarbital, 5-lb. cns.....lb. 3.60 - 3.70
dms., 100 lbs.....lb. 3.50 - —
Phenol,[6] USP, dms., c.l., works, frt. equald..lb. .10½- —
l.c.l., same basis.....lb. .11¼- —
tanks, same basis.....lb. .09½- —
Phenolphthalein, USP, bbls., dms., 2,000 lbs...lb. .85 - —
smaller lots.....lb. .87 - .89
yellow, fib. dms., 2,000 lbs..lb. .80 - —
smaller lots.....lb. .82 - .87
Phenothiazin, unmodified, fib. dms., 2,000-lbs. shipt..lb. .55 - —
smaller lots, same basis..lb. .65 - .70
Phenyl chloride, dms.....lb. .17 - —
Phenylacetaldehyde, 50% solut., bots..lb. 2.75 - 3.00
100% solut.. bots.....lb. 4.40 - 5.00
Phenylethyl acetate, cns.....lb. 5.00 - 5.25
Phenylethylphenyl acetate, bots., lb. 8.00 -15.00
Phenylhydrazin, base, CP, bots., lb. 4.55 - —
Hydrochloride, CP, bots., works, lb. 7.10 - —
commercial, kgs., works....lb. 1.75 - —
Phloroglucinol, CP, fib, dms...lb.13.75 -14.75
tech., fib., dms.....lb.12.00 -12.50
Phosgene, ton lots, works.....lb. .19 - —

Phosphate rock,[1,9] Fla., land pebble, unground, run-of-mine, washed, dried, 68%-66% b.p.l., M.P.R. 240 provisions, bulk, f.o.b. car, mine, c.l..long ton. 2.00 - —
70%-80% b.p.l., M.P.R. 240 provisions, same basis.... long ton. 2.40 - —
72%-70% b.p.l., M.P.R. 240 provisions, same basis.... long ton. 3.00 - —
75%-74% b.p.l., M.P.R. 240 provisions, same basis.... long ton. 4.00 - —
77%-76% b.p.l., M.P.R. 240 provisions, same basis.... long ton. 5.00 - —
77%-76%, finely ground, M.P.R. 240 provisions, same basis..short ton. 2.75 - —
68%, basis 31% P_2O_5 minimum..short ton. 3.00 - —
70%, basis 32% P_2O_5 minimum..short-ton. 3.25 - —
Entirely pebble 50c. per ton higher than above prices.
Tenn., brown unground, run-of-mine, washed, dried, 68%-66% b.p.l., f.o.b. cars, mines, c.l..long ton. 4.30 - —
70%-68% b.p.l. 5% i. & a., M.P.R. 240 provisions, same basis..long ton. 4.80 - —
72%-70% b.p.l., 5½% i. & a., M.P.R. 240 provisions, same basis..long ton. 5.30 - —
refinery ground rock, same basis..short ton. 4.50 - —
30% P_2O_5, same basis.. short ton. 4.70 - —

Phosphate rock, Tenn., brown unground, run-of-pile, washed, dried, 31% P_2O_5, same basis, short ton 4.80 - —
32% P_2O_5, same basis.. short ton. 5.00 - —
33% P_2O_5, same basis.. short ton. 5.50 - —
Phosphorus, red amorphous, cs., lb. .40 - .44
tins, export.....lb. .55 - —
yellow,[9] dms.....lb. .55 - —
cs.....lb. .23 - .25
Oxychloride,[6] cyls.....lb. .15 - .15
Pentoxide, dms., c.l., works..lb. .11 - .12
dms., l.c.l., works.....lb. .13 - .14
Sesquisulphide, cs.....lb. .38 - .42
Trichloride, cyls.....lb. .15 - .16
Phthalamide, bbls., works...lb. .35 - .40
kgs., works.....lb. .45 - .50
Phthalic anhydride,[6] bbls., c.l., works, frt. alld. E. of Miss. lb. .14½- —
l.c.l., same basis.....lb. .15½- —
Pichi leaves, bgs.....lb. .08 - .09½
Picrotoxin, bots .....oz. 8.00 - —
Pilocarpine, hydrochloride, bots., vls..oz. 3.90 - 5.25
Nitrate, bots., vls.....oz. 3.90 - 5.15
Pimento,[1] Jamaica, bgs., Tampa, lb. 1.25¼ Nom.
Mexican (see Allspice, Mexican).
Pinkroot, bls. .....lb. .63 - .80
Piperazine hexahydrate, bots, 100 lbs..lb.16.00 - —
Pitch, burgundy (see B).
Coaltar, 160° m.p., bbls., c.l., works., frt.allowed..ton.19.00 - —
l.c.l., works.....ton.22.00 - —
Hardwood, paper bgs., works..lb. .03½- —
Linseed, dms.....lb. .05 - .05½
Petroleum (see Asphaltum, Mexican, Texas).
Pine, dms.....100 lbs. 3.25 - —
stands, 200 lbs.....stand. 6.00 - —
Plaster of paris (see Gypsum).
Pleurisy root, Southern, bls...lb. .12 - .13
Podophyllin, dms.....lb. 8.75 - 9.00
Pokeroot, bbls.....lb. .10 - .11
Polyamylnaphthalene, dms., works, lb. .25 - —
Pomegranate, tree bark, bgs...lb. 1.05 - 1.10
Root bark, bgs.....lb. .80 - .85
Poppy flowers, red, bls.....lb. .70 - .85
Seed, Dutch, bgs.....lb. .60 - .62
Indian, white, bgs.....lb. .10 - .10¼
Turkish, bgs.....lb. .38 - .39
Potash abietate.....lb. .08 - —
Acetate, USP, bbls., dms...lb. .28 - .30
cns.....lb. .31 - .33
Arsenite,[6] USP, solut., cbys., djns..lb. .13 - .15
Bicarbonate, USP, cryst., gran., bbls., dms..lb. .19 - .21
Bichromate,[5] spot, c.l., cks., bbls., works..lb. .09¾- —
6 casks or 10 bbls. or over, works..lb. .09¾- —
5 casks or 9 bbls. or less, works..lb. .10 - —
Potash bichromate in bgs., ¼c. less.
Bromide, USP, gran., bbls., lbs. lb. .27 - .31
kgs., 100 lbs.....lb. .23 - .32
Carbonate, calc., dms., c.l., works..lb. .06½- —
l.c.l., same basis.....lb. .06¾- —
hydrated, 82-85%, bbls., c.l., works..lb. .05½- —
l.c.l., dms., same basis..lb. .05¾- —
liquid, dms., c.l., works, frt. alld..lb. .03 - —
l.c.l., dms., same basis..lb. .03½- —
tanks, same basis.....lb. .02¾- —
USP, gran., bbls., dms.....lb. .14 - .20
powd., bbls., dms.....lb. .19 - .21
Caustic, flake, 88-92%, dom., c.l., works..lb. .07 - —
l.c.l., works.....lb. .07½- —
liquid, 45% basis, dms.....lb. .03½- .03½
tanks .....lb. .02¾- —
solid, 88-92%, dom., dms., c.l., works..lb. .06¼- —
l.c.l., ...lb. .06½- .06¾
Chlorate,[2,6] cryst., kgs., wks. lb. .11 Nom.
powd., kgs., works.....lb. .09¾- .10
exp't., 1 to 10 tons, kgs., ex whse..lb. .18 - .20
Chloride, tech., 98%, cryst., bgs., kgs..lb. .06 Nom.
Chromate,[2,5] bgs.....lb. .24 - .27
Citrate, USP, gran., bbls....lb. .33½- —
smaller lots, dms.....lb. .34½- .35½
powd., 3c. per lb. higher.
Cyanide, dms., works.....lb. .55 - —
Fluoride, bbls.....lb. .34 - .40
Glycerophosphate, 75%, sol., dms., 1,000 lbs..lb. 1.50 - —
100 lbs.....lb. 1.60 - —
cns., cbys.....lb. 1.65 - 1.77
Guaiacolsulphonate, NF, dms.lb. 1.65 - 1.85
Hydroxide, USP, sticks, dms.lb. .34 - .36
Hypophosphite, cns.....lb. .72 - .75
Iodate, bots., 5 lbs.....lb. 3.46 - —
cns., 25 lbs.....lb. 3.35 - —
Iodide, bots. or cns.....lb. 1.44 - 1.48
dms.....lb. 1.35 - 1.38
Kainit, 20% K_2O, bulk, ex vessel, Atlantic or Gulf ports. ton. No prices
Manure salt, dom.,[6] 22% K_2O, f.o.b. Carlsbad, N. M... unit-ton. .20 - —
Seasonal contract discounts to June 30, 12%.
25% K_2O, same basis.unit-ton. .21 - —
import, 30% K_2O, bulk, ex vessel, Atlantic or Gulf ports..ton. No prices
Metabisulphite, gran., bbls...lb. .19 - .21
powd., bbls.....lb. .25 - —
Muriate, dom.,[6] 60-62-63% K_2O, bulk, ex vessel ports.. unit-ton. .53½- —
Seasonal contract discounts to June 30, 12%.
granular, 50-52, K_2O..... unit-ton. .56 - —
Russian,[6] offered from consignments afloat, subject to safe arrivals..unit-ton. .53½- —
Domestic muriate of potash prices, basis f.o.b. Carlsbad, N. M., are 11.2c. per unit of K_2O less than the ex vessel price, basis Trona, Cal., 8c. per unit of K_2O less than ex vessel price at Pacific Coast ports.
Nitrate (see Saltpeter).
Oxalate, neutral, pure gran., bbls., dms..lb. .37 - .50
fine gran., bbls., dms.....lb. .28 - .31
Perchlorate,[6] kgs., works....lb. .09½- .11
Permanganate, tech., dms., works..lb. .19¾- .20¼
USP, dms., works.....lb. .20½- .21
Prussiate, red, bbls., dms...lb. .70 - .75
Yellow, bbls.....lb. .16 - .17
Ricinoleate, tech., bbls.....lb. .18 - —
Silicate, alkaline, lumps, bgs., works..lb. .07 - —
glass, bgs., c.l.....ton.290.00 - —
l.c.l. .....100 lbs.15.25 - —
solution, 20° Be. ret. dms., c.l., works..100 lbs. 4.25 - —
l.c.l., 5 or more, works. 100 lbs. 5.00 - —
1-4, works.....100 lbs. 5.50 - —
32° Be, ret. dms., c.l., works..100 lbs. 4.75 - —
l.c.l., 5 or more, works. 100 lbs. 5.50 - —
1-4, works.....100 lbs. 6.00 - —



RIVER OF *Destiny*

In Niagara Falls the river and the land have combined in such a way as to cause wonder and admiration in the hearts of men. In a similar way, too, the river of humanity that has poured across our shores in the last three hundred years has combined with the land to shape a nation whose progress holds great fascination for the rest of the world. Today it is seen as a stream of destiny which men of all countries may follow with hope and confidence.

Like Niagara, America generates power as it goes forward. The energy inspired by its success under its free institutions is being transferred to other countries. The promise of safe and sound leadership in world affairs offered by this country is a source of courage to millions of people in lands where oppression rules. For with the natural and human resources of the U. S. A. working and fighting on the side of the oppressed, wherever they are, America is now more than ever before in its history a river of destiny which leads to security and happiness.

We who work within sight and sound of Niagara Falls are devoting every ounce of our energies and facilities to speeding the flow of chemicals for Victory.

CAUSTIC POTASH • CAUSTIC SODA
PARA • CARBONATE OF POTASH
LIQUID CHLORINE

EBG Niagara ALKALI COMPANY
60 EAST 42nd STREET, NEW YORK, N. Y.

An Essential Part Of America's Great Chemical Enterprise

Potash silicate, solut., 40.5° Be, ret. dms., c.l., works..100 lbs. 5.75 - —
l.c.l., 5 or more, works, 100 lbs. 6.50 - —
1-4, works.....100 lbs. 7.00 - —
Sulphate, NF, powd., bbls....lb. .15 - .21
Prices on granular 4c. higher.
Potash-gold cyanide, 41% gold, bots., works..oz.14.20 -14.95
Potash-magnesia, sulphate, dom., bulk, min., 46%, K_2SO_4, 18.50% MgO, ex vessel, ports, ton.26.00 - —
Potash-soda ferricyanide, dms., works...lb. .40 - .42
Potash-titanium oxalate, bbls., dms..lb. .45 - .50
Prickly ash bark, bls.....lb. .11 - .12
Berries, bgs.....lb. .25 - .25
Prince's pine herb bls.....lb. .33 - .34
Procaine hydrochloride, cns., 25 lbs..lb. 8.00 - —
smaller lots.....lb. 8.25 - 8.75
Propane,[1] industrial grade, tanks, Group 3..gal. .03¼- .03¾
Psyllium seed (see Fleaseed).
Pulsatilla, bls.....lb. .68 - .69
Pumice, grd., fine, bgs, ton lots, lb. .03¾- —
smaller lots.....lb. .03¾- .04
coarse, 0½, 1, 1½, 2, 3, bgs., ton lots.....lb. .03¾- —
smaller lots.....lb. .03¾- .04¼
Chi., ton lots.....lb. .04¼- —
Pumice stone packed in barrels is ½c. per lb. higher than the above prices.
Pumpkin seed, bgs.....lb. .12 - .18
Purple lake (see Red).
Putty, com'l, dms.....100 lbs. 3.15 - —
linseed oil, raw, dms...100 lbs. 5.00 - —
refined, dms.....100 lbs. 5.50 - —
standard, dms .....100 lbs. 4.20 - —
Pyrethrum[4] concentrate, liq. (20 to 1), basis 2 grams pyrethrins per 100 cc., dms., dlvd., gal. 5.75 - —
(30 to 1), 3 grams pyrethrins per 100 cc., dms., dlvd.gal. 8.53 - —
Flowers,[4] coarse-grd. (g.f.p.) 0.9% pyrethrins, bbls., frt. alld..lb. .27 - .28
fine-grd., 0.9% pyrethrins, bbls. lb. .29 - —
1.3 pyrethrins, frt. alld., bbls..lb. .30 - —
powd., 0.5 pyrethrins, bbls., frt. alld..lb. .23 - —
Pyridin,[4] denaturing, dms., wks., gal. 1.71 - —
refd., 2°, dms., same basis..lb. .46 - —
Pyrites, Spanish, c.i.f. Atl. ports, long-ton. 8.00 -10.00
Pyrocatechin, CP, cryst., works, fib. dms., tins..lb. 2.15 - 2.40
resublimed, fib. dms., tins..lb. 4.00 - —
Pyrophyllite, standard, 200 mesh, c.l., pap. bags., mines..ton.10.00 - —
325 mesh, same basis....ton.13.00 - —
No. 3, 200 mesh, c.l., mines.ton. 8.00 - —
325 mesh, same basis.....ton.11.00 - —
Pyroxylin scrap, amber, cs., works..lb. .12 - —
black, cs., works.....lb. .10 - —
China, white, ivory, cs., wks.lb. .13 - —
dense, white, cs., works....lb. .10 - —
gray, cs., works.....lb. .08 - —
mixed, mottles, opaques, cs., works..lb. .04 - —
translucent pastels, cs., wks.lb. .19 - —
transparent, cs., works....lb. .20 - —
colors, cs., works.....lb. .12 - —
shavings, amber, cs., works..lb. .16 - —
colors, mixed, cs., works..lb. .10 - —
white, cs., works.....lb. .15 - —

Q

Quassia chips, bls.....lb. .06 - .06
Quebracho extract,[4] solid, 65%, bgs., c.l., ex dock, in bond, lb. .04¼- —
clarified, 64%, bgs., c.l., same basis..lb. .05½- —
dissolved, 55% tan., bbls., works..lb. .04½- —
tanks, works.....lb. .04 - —
ground, bgs., c.l.....lb. .03½- —
l.c.l., bgs.....lb. .06 - —
Queen of the meadow leaves, bgs..lb. .12 - .13
Root, bgs.....lb. .10 - .14
Quercitron, crystals, bbls.....lb. .26 - —
extract, bbls., No. 1.....lb. .10 - —
No. 2.....lb. .09½- —
No. 3.....lb. .09 - —
solid, bgs.....lb. .18½- —
Quicksilver,[1,4,6] flasks (76 lbs. net), f.o.b. shipment point in Cal., Ore., Wash., Idaho, Utah, Nev., and Ariz..flask.191.00 - —
Tex. and Ark.....flask.193.00 - —
Quicksilver freight $4.25 per flask to N.Y.; dealers' commission, 1%; brokers, 2%.
Quince seed, bgs.....lb. 1.45 - 1.90
Quinidine,[5] NF V, cryst., cns.oz. 1.06 + .13¼*
powd., precip., cns.....oz. 1.01 + .13½
Sulphate, USP, cns.....oz. .71 + .13½

* Surcharge of 13½c. per oz.; see note under Quinine.

Quinine,[5] N.F., cns, 100 ozs...oz. .84 + .13½*
Acetate, cns., 100 ozs.....oz. 1.05 + .13½
Arsenate, cns., 100 ozs.....oz. 1.05 + .13½
Arsenite, cns., 100 ozs.....oz. 1.07 + .13½
Bisulphate, USP, cns., 100 ozs. oz. .69 + .13½
Citrate, cns., 100 ozs.....oz. .78 + .13½
Dihydrobromide, bots., 50 ozs. oz. .86 + .13½
Ethylcarbonate, USP, cns., 100 ozs..oz. 1.25 + .13½
Ferrocyanide, cns., 100 ozs..oz. 1.07 + .13½
Formate, cns., 100 ozs.....oz. 1.00 + .13½
Glycerophosphate, cns., 100 ozs. oz. 1.20 + .13½
Hydrochloride, USP, cns., 100 ozs..oz. .76 + .13½
Hydrochlorosulphate, cns., 100 ozs..oz. .81 + .13½
Hydroiodide, cns., 100 ozs.. oz. 1.05 + .13½
Hypophosphite, cns., 100 ozs., oz. 1.07 + .13½
Phosphate, N.F., cns., 100 ozs. oz. .90 + .13½
Salicylate, N.F., cns., 100 ozs. oz. .79 + .13½
Sulphate, USP, cns., 100 ozs. oz. .67 + .13½
Sulphocarbolate, cns., 100 ozs. oz. 1.05 + .13½
Tannate, USP X, cns., 100 ozs. oz. .68 + .13½
Valerate, N.F. IV, 100 ozs. oz. .99 + .13½
Tartrate, cns., 100 ozs.....oz. 1.02 - .13½

* Surcharge to cover present war risk insurance, ocean freight rates, and addtional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surchage invoiced.

Quinine-urea hydrochloride,[5] USP, cns..oz. .81 + .13½*
Surcharge,; see note under Quinine.

R

R salt, dry, bbls.....lb. .55 - —
paste, dms.....lb. .52 - —
Rapeseed,[1] Argentine, bgs...lb. .09½ Nom.
dom., dwarf Essex, bgs...lb. .11½- .12
Indian, red, large, bgs.....lb. .10 - .10½
recleaned, bgs.....lb. .11 - .11½
Raspberries, dried, bls.....lb. .90 - .97
Red, alizarin lake,[3] bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. 1.10 - 1.90
Prices ½c. per lb. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N.C., S.C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. per lb. higher dlvd. Pacific Coast; prices equald with Chicago dlvd. Denver, Pueblo, Salt Lake City, Wichita.
Cadmium lithopone, deep shade, bbls., E. of Rockies..lb. 1.00 - —
smaller pkgs., same basis..lb. 1.05 - —
light shade, bbls., same basis..lb. .85 - —
smaller pkgs., same basis..lb. .90 - —
medium shades, bbls., same basis..lb. .90 - —
smaller pkgs., same basis.lb. .95 - —
Selenide, dark, bbls., works, lb. 2.50 - —
light, same basis.....lb. 2.20 - —
orange, bbls., 100-lb. lots, works..lb. 1.50 - —
Red, carmine, 40, dms., 100 lbs., works..lb. 4.60 - —
smaller lots, works.....lb. 4.75 - 5.25
Crocus martis (see Red, purple oxide).
Dyes (red) are listed under Dyes.
Eosan toner, bbls., works....lb. 1.35 - —
Firetoner, dom., bbls., wks..lb. .85 - —
Indian, pure, bbls., f.o.b. Bethlehem, Easton, E. St. Louis, N. Y..lb. .09¼- —
80-85%, bbls., same basis, lb. .07¾- —
imp., English, all shades..lb. .12 - —
Lacquer, maroon, bbls., works lb. 1.25 - —
Lake C toner, alizarin, bbls., works..lb. .90 - —
Lithe toner, alizarin lake, bbls., works..lb. .60 - —
Pink, bbls., works.....lb. .29 - .35
Rose lake, bbls., works....lb. .25 - .28
Lithol-rubin toner, alizarin lake, bbls., works..lb. 1.10 - —
Maroon, alizarin lake, 25%, kgs., works..lb. .40 - —
cadmium, bbls., works....lb. 1.10 - —
smaller pkgs., same basis, lb. 1.15 - —
deep, bbls., same basis...lb. 1.20 - —
smaller pkgs., same basis, lb. 1.25 - —
Mercury oxide,[3] tech., bbls., 10,000 lbs., works..lb. 3.05 - —
smaller lots.....lb. 3.11 - —
Metallic, bbls., Pa. works..lb. .92 - —
Orange, Persian (see O).
Oxide, pure, bbls., c.l., works, lb. .09 - —
l.c.l., bbls.....lb. .09¾- —
reduced, 85% copperas oxide, bbls., l.c.l., f.o.b. Bethlehem, Easton, E. St. Louis, Copley, Ohio..lb. .08¾- —
Red, oxide, reduced, 80% copperas oxide, bbls., same basis..lb. .08¼- .096
Para[3] toner concent., alizarin lake, kgs., works..lb. .70 - —
Phloxin toner (see Red, Eosin toner).
Phosphotungstic rhodamine, Y, kgs., works..lb. 4.15 - —
Purple, lake, kgs.....lb. .60 - 1.00
Scarlet ink toner, kgs., works lb. .55 - —
Lake, alizarin, kgs., works lb. .35 - —
Spanish oxide, grade 1, c.l., bbls..lb. .04¾- .07¾
Toluidin toner, alizarin lake, kgs., works..lb. 1.05 - —
M.N.P.T. maroon toner, kgs., works..lb. 2.25 - —
Turkey, bbls., works.....lb. .14½- —
Tuscan, bbls., E. St. L.....lb. .11 - .40
Venetian, 5%, bbls., works..lb. .0220- —
10%, bbls., works.....lb. .0245- —
15%, bbls., works.....lb. .0265- —
20%, bbls., works.....lb. .02¾- —
25%, bbls., works.....lb. .03 - —
30%, bbls., works.....lb. .03¼- —
35%, bbls., works.....lb. .0360- —
40%, bbls., works.....lb. .04 - —
Vermilion, Amer., bbls.....lb. .25 - .40
Quicksilver, bbls.....lb. 3.05 - 3.15
Red precipitate,[3] NF, powd., fib. dms., 50 lbs..lb. 3.26 - —
Red saunders wood, grd., bbls., lb. .35 - —
Resorcinol,[4] tech., dms., frt. alld. E. of Miss..lb. .63 - .75
USP, cryst., dms., 100 lbs., frt. alld. E. of Miss..lb. 1.80 - —
Rhatany root, bgs.....lb. .09 - .10
Rhubarb, whole, bgs.....lb. 1.15 - 1.35
powd., bbls.....lb. 1.20 - 1.40

Bombers Need Alkalies

In aluminum, glass, paint, plastic, fuel, explosives, and in many other materials required to make a bomber, Solvay Alkalies play an invisible yet crucial part. Without them, there might be no giant bombers . . . there might be no Victory. In war, as in peace, alkalies are indispensable!

SOLVAY SALES CORPORATION *Alkalies and Chemical Products Manufactured by The Solvay Process Company*

Riboflavin,[6] bots.....gram. .53½- .63½
Rice bran concentrate, dms., Cedartown, Ga., or Emeryville, Calif., seller's option, lb. .79 - —
Rochelle salt, cryst., bbls., 5,000 lbs., 1 ship't..lb. .43½- —
smaller lots.....lb. .44 - .47
powd., bbls., 5,000 lbs., 1 ship't. lb. .42½- —
smaller lots.....lb. .43 - .46
Rose flowers, pale, bls.....lb. .30 - .35
Rosemary flowers, bls.....lb. 1.55 - 1.60
Leaves, Portuguese, bls.....lb. .11½- .12
Spanish, bls.....lb. .18 - .18½
Rosin, gum, ex dock:—
B, dms.....100 lbs. 3.42 - —
D, dms.....100 lbs. 3.64 - —
E, dms.....100 lbs. 4.08 - —
F, dms.....100 lbs. 4.11 - —
G, dms.....100 lbs. 4.20 - —
H, dms.....100 lbs. 4.20 - —
I, dms.....100 lbs. 4.21 - —
K, dms.....100 lbs. 4.41 - —
M, dms.....100 lbs. 4.44 - —
N, dms.....100 lbs. 4.44 - —
W.G., dms.....100 lbs. 4.85 - —
W.W., dms.....100 lbs. 4.95 - —
X, dms.....100 lbs. 4.95 - —
Wood, F.F., dms.....100 lbs. 3.64 - 3.98
Rottenstone, bgs., c.l., mines.ton.25.50 - —
l.c.l., same basis.....ton.37.50 - —
Rue, bls.....lb. 1.45 - 1.50

S

Sabadilla seed, powd., bbls....lb. .29 - .31
Saccharin,[3] dms., makers, primary distrib., 1,000 lbs. up..lb. 1.30 - 1.35
smaller lots.....lb. 1.40 - 1.60
Saffron, Mexican, bls.....lb. .55 - .56
Spanish, tins.....lb.26.00 -28.00
Safrol, cns.....lb. 2.25 - 2.45
Sage,[1] Calif., Dalmatian type, bls..lb. .75 - .77
leucophylla, bls., Pacific coast, lb. .38 - .39
Cyprus, bls.....lb. .28 - .29
Greek, bls.....lb. 1.60 - 1.70
Spanish, bls.....lb. .29½- .30½
Sago flour, bgs.....lb. .05 - .05¾
Salicin, bots., 5 lbs.....lb. No stocks
cns., 25 lbs.....lb. No stocks
Salol, gran., bbls., kgs.....lb. .90 - —
fib. dms.....lb. .92 - .98
powder, 10c. per lb. higher.
Salt, rock, bgs., c.l.....ton.14.20 - —
l.c.l., bgs.....ton.17.00 -18.00
vacuum, common, fine, bgs., c.l..ton.15.70 - —
l.c.l. .....ton.19.40 -20.20
Saltcake, dom., bulk, works..ton.13.00 - —
Chrome (see Chrome cake).
Saltpeter, dbl. ref., gran., bbls., 10 tons..100 lbs. 8.20 - —
smaller lots.....100 lbs. 8.35 - 8.60
powd., bbls., 10-20 tons.... 100 lbs. 9.20 - —
smaller lots.....100 lbs. 9.35 - 9.60
Sanguinarine nitrate, bots....oz. 3.75 - —
Santonin, cryst., cns.....kilo.210.00 -220.00
Saponin, No. 1, cns.....lb. 1.75 - —
No. 2, cns.....lb. 1.45 - —
Sarsaparilla root, Amer., bls..lb. .25 - .30
Honduras, bls.....lb. .59 - .60
Mexican, bls.....lb. .20 - .21
Sassafras, bark, ord., bls....lb. .20 - .21
select, bls.....lb. .35 - .38
Savory, bls.....lb. .75 - 1.20
Saw palmetto berries, bgs....lb. .09 - .14
Scammony resin, lump, cns...lb. 1.50 - —
powd., cns.....lb. 1.25 - —
Root, bgs.....lb. .07 - .08
Schaeffer's salt, bgs.....lb. .46 - —
Scullcap, Eastern, bls.....lb. .25 - .32
Western, bls.....lb. .17 - .18
Seidlitz mixture, bbls., 5,000 lbs., 1 shipment..lb. .33¾- —
smaller lots.....lb. .34½- —
kegs, 5,000 lbs., 1 shipm't..lb. .34½- —
smaller lots.....lb. .34¾- —
Selenium, pwd., cs., 100 lbs..lb. 1.25 - —
cns., 10 lbs.....lb. 2.00 - —
Senega root, spot, bls.....lb. .82 - .83
Senna, Alex., half leaf, bls...lb. .22 - .26
siftings, bgs.....lb. .21 - .22
Tinnevelly, No. 1, bls.....lb. .16 - .16½
2, bls.....lb. .11½- .12
3, bls.....lb. .10½- .11
powd., bbls., bxs.....lb. .15 - .17
Pods, bls.....lb. .13 - .16
Serpentaria root, bls.....lb. .80 - .82
Sesame seed,[1] Chinese, hulled, bgs..lb. .12¼- .12¾
Indian, hulled, sterile, bgs.lb. .12 - .12½
natural, bgs.....lb. .10¾- .11¼
Shellac,[1,6] bonedry, bbls., 1,500 lbs..lb. .42½- —
Boston .....lb. .43½- —
Chicago .....lb. .44 - —
Pacific coast.....lb. .46 - —
refined, bbls., 1,500 lbs....lb. .48½- —
Boston .....lb. .49½- —
Chicago .....lb. .50 - —
Pacific coast.....lb. .52 - —
Bonedry shellac, sales of less than 1,500 lbs., at following additions to maximum prices:—(1) packed in bgs., ¾c. per lb.; (2) bbls., 1c. more; (3) kgs., 3c. more.
D.C., V.S.O., or Diamond 1, bgs., lots of 100..lb. .4660- —
Garnet, bgs., lots of 100.....lb. .3890- —
Superfine, Boston., N. Y., lots of 100..lb. .3660- —
Chicago, lots of 100.....lb. .3710- —
Pacific coast, lots of 100...lb. .3960- —
T.N., Boston, N. Y., lots of 100, lb. .3550- —
Chicago, lots of 100.....lb. .3600- —
Pacific coast, lots of 100...lb. .3805- —
Shellac in cs., 2c. higher. Shellac sales, 1 bg. or 1 cs., 5c. additional; 1 to 9 bgs. or cs., 2c. more; 10 to 99 bgs., cs., 1c. more.
Shortening, trcs.....100 lbs.16.50 -17.00
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., Ill., works. ton.17.00 - —
l.c.l., same basis.....ton.20.00 - —
400 mesh, bgs., c.l., same basis..ton.18.00 - —
l.c.l., same basis.....ton.19.00 -20.00
wet-grd., 325 mesh, bgs., c.l., same basis..ton.18.00 - —
l.c.l., same basis.....ton.21.00 - —
400 mesh, bgs., c.l., same basis..ton.30.00 - —
l.c.l., same basis.....ton.35.00 -38.00
99-99⅞%, 325 mesh, bgs., c.l., same basis..ton.20.00 - —
l.c.l., same basis.....ton.21.50 -23.00
99⅞% 325 mesh, bgs., c.l., same basis..ton.20.00 - —
l.c.l., same basis.....ton.22.00 -25.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., same basis..ton.13.50 - —
l.c.l., same basis.....ton.18.50 - —
140 mesh, bgs., c.l., same basis..ton.11.00 - —
l.c.l., same basis.....ton.16.00 - —
Silicon tetrachloride, CP, dms., 55 gals., works..lb. .27 - —
10 gals., works.....lb. .32 - —
tech., dms., 55 gals., wks.lb. .22 - —
10 gals., works.....lb. .27 - —
Silver, bullion.....oz. .44¼- —
govt. purchase, dom.....oz. .7111- —
govt. purchase,[1] foreign....oz. .44¼- —
Cyanide, cns., 100 ozs.....oz. .41½- —
Nitrate, 100-oz. bots.....oz. .32½- —
Nucleinate, bots., dms.....oz. .328 - .358
Proteinate, bots., dms.....oz. .288 - .338
Simarubra bark, bls.....lb. .60 - .67
Skunk cabbage root, bls.....lb. No stocks
Slate flour, bgs., c.l., works..ton.11.00 -12.00
l.c.l., works.....ton.12.00 -13.00
Sloe berries, bgs.....lb. .75 - .80
Smalt, black, cns.....lb. .05 - .06
Blue, cns.....lb. .07 - .08¼
Snakeroot, Canada, bls.....lb. .66 - .67
Soapbark, bls.....lb. .11¾- .12¼
crushed, bls., bbls.....lb. .13 - .14
cut, dom., bls., bbls.....lb. .16 - .17
imp., bbls.....lb. .18 - .19
powd., bbls.....lb. .17 - .18
Soda acetate, anhyd., bbls., divd. lb. .08½- .10
flake, gran., powd., 99%, bbls., c.l., divd..lb. .06 - —
l.c.l., divd.....lb. .05½- .06
N. F. VII, bbls., divd....lb. .09½- .10
Alginate, refined, water-soluble, bbls., works..lb. .79 - —
semi-refined, bbls., works..lb. .42 - —
white, powd., dms.....lb. 1.50 - 1.80
Aluminate,[6] for water treat., bgs., c.l., works..100 lbs. 7.50 - —
l.c.l., works.....100 lbs. 8.40 - —
other uses, bgs., c.l., works, 100 lbs. 7.00 - —
l.c.l. .....100 lbs. 7.50 - 8.00
Antimoniate, bbls., divd....lb. .15 - .15½
Arsenate,[6] dms., dealers, c.l., works..lb. .09½- —
l.c.l., same basis.....lb. .10¾- .11¼
Arsenite,[6] gray, dms., c.l., dealers, works..lb. .08¼- —
l.c.l., dealers, works...lb. .09 - .10
Soda arsenite, gray, ¾c. higher in Chi.; 2c. higher in Houston, Tex., and Palo Alto, Calif.
Ash, dense, 58%, bgs., c.l., works..100 lbs. 1.15 - —
l.c.l., divd., zone 1.100 lbs. 2.18 - —
2 .....100 lbs. 2.33 - —
3 .....100 lbs. 2.58 - —
4 .....100 lbs. 2.96 - —
bbls., c.l., works.....100 lbs. 1.25 - —
l.c.l., divd., zone 1.100 lbs. 2.35 - —
2 .....100 lbs. 2.50 - —
3 .....100 lbs. 2.75 - —
4 .....100 lbs. 3.15 - —
bulk, c.l., works....100 lbs. .95 - —
extra light, 58%, bgs., c.l... 100 lbs. 1.13 - —
l.c.l., divd., zone 1.100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.90 - —
bbls., c.l., works....100 lbs. 1.45 - —
l.c.l., divd., zone 1..... 100 lbs. 2.45 - —
2 .....100 lbs. 2.60 - —
3 .....100 lbs. 2.85 - —
4 .....100 lbs. 3.25 - —
bulk, c.l.....100 lbs. .90 - —
light, 58%, bgs., c.l., works. 100 lbs. 1.05 - 1.13
l.c.l., divd., zone 1..... 100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.90 - —
bbls., c.l., works....100 lbs. 1.35 - —
l.c.l., divd., zone 1.100 lbs. 2.35 - —
2 .....100 lbs. 2.50 - —
3 .....100 lbs. 2.75 - —
4 .....100 lbs. 3.15 - —
bulk, c.l.....100 lbs. .90 - —
Soda ash sales zones are:—(1) All States E. of Miss. R. and N. of south. bound. of Ky. and Va.; also Ala., La., and Miss., S. of 31°, Tex. E. of 100°, S. of 31°, Fla.; also Me., N.H., and Vt., in which there are special county zones: Davenport, Ia., and St. Louis; (2) Ark. E. of 98°, Ga., Iowa (except Davenport), Minn., Mo. (except St. Louis), Neb. E. of 98°, N.C., S.C., Tenn., and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La., and Miss. N. of 31°; (3) Ark. W. of 98°, Kans., Neb., W. of 98°, N.D., Okla., S.D., Tex. W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Ida., Mont., Nev., N.M., Utah, Wyo., and El Paso, Tex.
Benzoate, tech., bbls., 2 tons or more..lb. .39 - —
smaller lots.....lb. .40 - .43
USP, dms., 2 tons or more.lb. .46 - —
smaller lots.....lb. .47 - .52
900 lbs. or less.....lb. .50 - .52
Bicarbonate, tech., bbls., c.l., works..100 lbs. 1.70 - —
l.c.l. .....100 lbs. 2.05 - —
bgs., c.l., works.....100 lbs. 1.55 - —
l.c.l. .....100 lbs. 1.90 - —
USP, gran., bbls., c.l., works. 100 lbs. 2.25 - —
l.c.l. .....100 lbs. 2.60 - —
powd., bbls., c.l., works.... 100 lbs. 1.85 - —
l.c.l. .....100 lbs. 2.61 - —
kgs., c.l., works....100 lbs. 2.10 - —
l.c.l. .....100 lbs. 2.76 - —
Bichromate,[5] spot, bbls., cks., c.l., works..lb. .07¾- —
l.c.l., works.....lb. .07½- .07¾
Soda bichromate in bgs., ½c. less.
Bifluoride, bbls., c.l., frt. alld. E..lb. .11¼- —
l.c.l. .....lb. .12 - .14
kgs. .....lb. .12¼- .14
Bisulphite, powd., bbls., c.l., works..100 lbs. 3.00 - 3.10
l.c.l., works.....100 lbs. 3.50 - 3.60
solution, 32°, bbls., c.l., works. 100 lbs. 1.30 - —
l.c.l., works.....100 lbs. 1.55 - —

Natural BICHROMATES for Victory

UNIFORMS STAY BRIGHT when "FIXED" with "NATURAL"

Army authorities agree that good uniforms spur morale. Both woolen and O. D. cotton uniforms retain their color longer when bichromates are used as a mordant or fixing agent. This is but one way in which "Natural" Bichromates are contributing to the war effort. In the processing of leather; in certain paints and finishes for protection and camouflage; as a corrosion-resistant to metals; in cooling solutions — and in other services far more widespread than is generally realized, these crystals and solutions play an indispensable part. It is, and shall always be, our constant aim to guard the purity and quality of "Natural" products for both war and peace-time industries.

NATURAL PRODUCTS REFINING CO.
910 Garfield Ave. Jersey City, N. J.

BICHROMATE Natural OF SODA

Soda bisulphite, solut., 38°, bbls., c.l.,works..100 lbs. 1.35 - —
l.c.l., works.....100 lbs. 1.60 - —
35°, bbls., c.l., works.100 lbs. 1.40 - —
l.c.l., works.....100 lbs. 1.65 - —
44°, bbls., works.....100 lbs. 1.55 - —
l.c.l., works.....100 lbs. 1.80 - —
Bromide, NF., gran., bbls., 500 lbs., works..lb. .27 - .30
fiber, dms., works, 100 lbs. lb. .28 - .31
Cacodylate, 5-lb. bots, wks..lb.17.00 - —
Carbonate (see Soda ash, soda monohydrated, soda sal.)
Caustic, flake, powd., 76%, dms., c.l., works..100 lbs. 2.70 - —
l.c.l., zone 1, dlvd..... 100 lbs. 3.55 - —
2, dlvd.....100 lbs. 3.70 - 5.05
3, dlvd.....100 lbs. 3.95 - 5.30
4, dlvd.....100 lbs. 4.35 - 5.70
liquid, 47-49%, buyers' tanks, works..100 lbs. 1.92½- —
sellers' tanks, works.100 lbs. 1.95 - —
70%, buyers' tanks, works... 100 lbs. 1.97½- —
sellers' tanks, works... 100 lbs. 2.00 - —
solid, 76%, dms., c.l., works. 100 lbs. 2.50 - —
l.c.l., zone 1, dlvd..... 100 lbs. 3.15 - —
2, dlvd.....100 lbs. 3.30 - —
3, dlvd.....100 lbs. 3.55 - —
Caustic soda zones are same as soda ash.
Chloride (see Salt).
Chlorate,[6] dom., cryst., bgs., c.l., works..lb. .06¼- —
l.c.l., works.....lb. .06½- —
powd., bgs., c.l., works..lb. .06½- —
l.c.l., works.....lb. .07 - .08½
Chromate,[2,4] bbls., cks., c.l., works, frt. equald..lb. .08¾- —
l.c.l., works, frt. equald..lb. .08¾- .09¼
Soda chromate in bgs. is ¼c. lower.
Citrate, USP VIII, bbls.....lb. .18½- —
dms. .....lb. .19½- .23½
USP gran., bbls.....lb. .24 - —
dms. .....lb. .24 - .29
powd., bbls.....lb. .24½- —
dms. .....lb. .24¼- .29½
Cyanide [6] 96-98%, dms.....lb. .14½- .15
Diacetate, 33-35% acidity, bbls., dlvd..lb. .09½- .10¼
anhy., dms., dlvd.....lb. .12½- —
Fluoride, white, 96%, bbls., c.l., works..lb. .07 - —
l.c.l., works.....lb. .08 - —
95%, bbls., c.l., works....lb. .07¼- —
l.c.l., works.....lb. .08¼- —
Soda fluoride prices at Los Angeles are f.a.s. works.
Glycerophosphate, NF, cryst., bbls., 1,000 lbs..lb. 1.25 - —
smaller lots.....lb. 1.40 - 1.65
powdered, 5c. higher.
solution, cbys., cns.....lb. .82 - .90
Hydrosulphite, dms., frt. alld. lb. .17 - .18
Hydroxide, USP, sticks, dms.lb. .24½- .26
Hypophosphite, NF, cns.....lb. .67 - .70
Hyposulphite, cryst., bgs., c.l., works, frt. equald..100 lbs. 2.25 - —
l.c.l., same basis..100 lbs. 2.50 - —
pea, bgs., c.l., works.100 lbs. 2.60 - —
l.c.l., works.....100 lbs. 2.75 - 3.95
Soda hyposulphite in bbls., 20c. higher; in dms., 50c. higher.
Iodate, dms., jars.....lb. 5.40 - 5.45
Iodide, dms., jars.....lb. 2.42 - —
bots. .....lb. 2.53 - 2.57
Mandelate, dms.....lb. 3.25 - 3.35
Metanilate, bgs.....lb. .40 - —
Metasilicate, anhyd., dms., c.l., works, frt. equald.100 lbs. 4.00 - —
l.c.l., same basis..100 lbs. 4.90 - 5.80
gran., bbls., c.l., works, frt. equald..lb. 2.50 - —
l.c.l., dlvd.....100 lbs. 3.30 - 3.55
Molybdate,[6] anhyd., kgs., works lb. .47 - —
Monohydrated, bbls.....100 lbs. 3.00 - —
works .....100 lbs. 2.55 - —
Naphthionate, bbls.....lb. .50 - —
Nitrate,[6] crude, dom., 100-lb. bgs., c.l., Hopeville, Va. ton.30.05 - —
bulk, same basis.....ton.27.00 - —
imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse..ton.33.00 - —
200-lb. bgs., same basis.. ton.32.40 - —
bulk, same basis.....ton.30.00 - —
refd., gran., bbls., 10 tons... 100 lbs. 3.60 - —
smaller lots.....100 lbs. 3.75 - 4.00
Nitrite, 96-98%, dom., bbls., c.l., works, frt. equald..lb. .06¾- —
West Coast ports..... 100 lbs. 8.00 - 8.65
l.c.l., dlvd.....100 lbs. 8.90 -11.90
Orthosilicate, anhyd., dms., c.l., works, frt. equald..lb. 4.50 - —
l.c.l., same basis.100 lbs. 5.45 - 5.85
flake, dms., c.l., works..... 100 lbs. 3.15 - —
l.c.l., dlvd.....100 lbs. 4.30 - 4.55
Oxalate, neut., bbls.....lb. .46 - .41
Perborate, NF, bbls., c.l., works..lb. .14¾- —
l.c.l., works.....lb. .15¼- —
Pentachlorophenate briquets, bgs., works, frt. equald..lb. .17 - .18
powd., bgs., c.l., works, frt. equald..lb. .16 - .16½
l.c.l., works, frt. equald..lb. .17 - —
kgs., works.....lb. .19 - —
Phosphate, dibasic, tech., anhyd., bgs., c.l., works.. 100 lbs. 6.00 - 6.25
l.c.l., works....100 lbs. 6.50 - 7.25
cryst., bgs., c.l., works... 100 lbs. 2.55 - 2.70
l.c.l., works....100 lbs. 2.95 - 3.45
USP, bbls., dms., works..lb. .08 - .10
dried, bbls., dms., works. lb. .11½- .12
monobasic, anhydrous, bgs., c.l., works..100 lbs. 7.25 - 8.25
l.c.l., works.....100 lbs. 8.00 - 9.00
tribasic, anhydrous, bgs., c.l., works, frt. equald..100 lbs. 6.00 - —
l.c.l., same basis.100 lbs. 6.50 - —
cryst., bgs., c.l., same basis..100 lbs. 2.70 - —
l.c.l., same basis.100 lbs. 3.45 - —
kgs., c.l., works...100 lbs. 3.40 - —
l.c.l., works.....100 lbs. 4.15 - —
USP (see Sodium phosphate, dibasic).
Soda phosphate in bbls. is 20c. higher.
Picramate, kgs.....lb. .65 - —
Prussiate, yellow, bgs., contracts, works..lb. .09¾- .10½
spot .....lb. .10¾- —
bbls., contract, works.....lb. .10 - .10¼
spot .....lb. .11 - —
Pyrophosphate,[2] anhyd., bgs., c.l., works, frt. equald... 100 lbs. 5.28 - 6.10
l.c.l., same basis..100 lbs. 5.40 - 6.60
bbls., c.l., wks., frt. equald. 100 lbs. 5.45 - 6.30
l.c.l., same basis..100 lbs. 5.60 - 6.60
Ricinoleate, tech., bbls.....lb. .12 - —
Sal, bgs.....100 lbs. 1.35 - —
works .....100 lbs. 1.10 - —
bbls.....100 lbs. 1.40 - —
works .....100 lbs. 1.20 - —
Salicylate, bbls., dms., kgs..lb. .52 - .55
Sesquicarbonate, bgs., c.l., works..100 lbs. 1.50 - —
bbls., c.l., works.....100 lbs. 1.70 - —
l.c.l., zone 1, dlvd..100 lbs. 2.70 - —
2, dlvd.....100 lbs. 2.85 - —
3, dlvd.....100 lbs. 3.10 - —

Soda sesquicarbonate, bbls., l.c.l. zone 4, dlvd..100 lbs. 3.50 - —
Soda sesquicarbonate l.c.l. price zones are same as those for soda ash.
Sesquisilicate, dms., c.l., works 100 lbs. 3.05 - —
l.c.l., dlvd.....100 lbs. 4.05 - 4.30
Silicate, 40° turbid., dms., c.l., works..100 lbs. .80 - —
l.c.l., works.....100 lbs. 1.05 - 1.20
tanks, works.....ton.13.00 - —
52°, dms., c.l., works..100 lbs. 1.40 - —
l.c.l., works.....100 lbs. 1.65 - 1.80
tanks, works.....ton.25.00 - —
Silicofluoride, bbls., c.l., works, lb. .05 - —
l.c.l., same basis.....lb. .05½- —
Stannate, dms., works, frt. alld. E..lb. .32½- .36¼
Stearate, bbls., works.....lb. .19 - .24
Sulphate, N.F., dried, powd... bbls. .07 - .07½
tech., anhyd., bgs., bbls., c.l., works..100 lbs. 1.70 - 1.90
5 tons or more, works... 100 lbs. 1.95 - 2.15
less than 5 tons, works. 100 lbs. 2.20 - 2.40
cryst. (see Glauber's salt)
USP, cryst., gran., bbls..lb. .10 - .10½
Sulphide, cryst., bbls., c.l., works..100 lbs. 2.40 - —
l.c.l., dlvd.....100 lbs. 2.90 - 3.15
solid, bbls., c.l., works.100 lbs. 3.15 - —
l.c.l., dlvd..100 lbs. 3.65 - 3.90
Sulphite, cryst., bgs., works.lb. 2.10 - 2.35
bbls., same basis..100 lbs. 2.30 - 2.55
powd., bbls., c.l.....100 lbs. 5.25 - —
l.c.l. .....100 lbs. 5.50 - 6.00
Sulphocarbolate, USP IX, gran., bbls., dms..lb. .28 - .33
powd., bbls.....lb. .30 - .31
Sulphocyanide, C.P., dms....lb. .55 - .65

Soda, sulphohydrate, liquid, 38%, basis 100%, dms., c.l., works. lb. .05½- —
l.c.l., works.....lb. .06 - .08
tanks, works.....lb. .04½- —
flake, 70-72%, dms., c.l., works lb. .04½- —
l.c.l., works.....lb. .05 - —
Sulphoricinoleate, bbls.....lb. .12 - —
Thiosulphate (see Soda hyposulphite).
Tungstate,[6] tech., kgs.....lb. 1.35 - 1.50
Soda-formaldehyde sulphoxylate, stand. cont. (125-250 lbs.).lb. .19 - .22
Solvent naphtha, dms., wks..gal. .31 - —
tanks, frt. alld. E. of Omaha. gal. .27 - —
Minnequa, Colo.....gal. .27 - —
high-flash, dms., works..gal. .32 - —
tanks, frt. alld. E. of Omaha..gal. .27 - —
Sorbitol,[6] com'l, dms., works..lb. .17¾- —
Soybean meal,[1] 41% protein, Decatur, Ill., May, bulk..ton.33.25 - —
Southeastern mills, bulk..ton.45.00 Nom.
Protein, alpha, bgs., 40,000-60,000 lbs., works..lb. .17 -
smaller lots, works.....lb. .17¼- .17½
Sparteine sulphate, bots., cns. oz. 2.25 - 2.75
Spearmint leaves, bls.....lb. .35 - .36
Spikenard root, bls.....lb. .38 - .39
Spruce extract, reg., bbls., c.l., works..lb. .02½- —
tanks, works.....lb. .01½- —
pwd., super, bgs., c.l., wks.lb. .04½- —
Squawvine leaves, bls.....lb. .14 - .15
Squill, red, powd.....lb. .85 - .88
White, bls.....lb. .11 - .15
powd., bbls., bxs.....lb. .18 - .19
St. Ignatius beans, bgs.....lb. .45 - .60
St. John's bread, edible, bls..lb. .25 - .30
Starch, corn, pearl, bgs..100 lbs. 3.47 - —
Chicago .....100 lbs. 3.10 - —
powd., bgs .....100 lbs. 3.57 - —
Chicago .....100 lbs. 3.20 - —
Potato, bgs., c.l.....lb. .0637- —
l.c.l. .....lb. .0712- —

Starch, rice, bgs.....lb. .09½- .10¼
Sweetpotato, bgs.....lb. No stocks
Wheat, thick boil, bgs.....lb. .05 - —
Starch iodide, bots.....lb. 1.87 - —
Stearin, oleo (see Oleostearin)
Stillingia root, bls.....lb. .11 - .12
Stoneroot, bls.....lb. .07½- .08
Storax, cs.....lb. 1.75 - 1.80
Stramonium leaves, bgs.....lb. .24 - .25
Seed, bgs.....lb. .20 - .21
Strontium bromide, cns., dms..lb. .52 - .54
Carbonate, tech., 90%, bbls.lb. .25 Nom.
Chloride, tech., bbls.....lb. .23 - .25
Iodide, bots.....lb. 3.06 - 3.15
jars, 25 lbs.....lb. 3.00 - —
Lactate, dms.....lb. 1.30 - 1.35
Nitrate, bbls., c.l., works..lb. .07¾- —
l.c.l., works.....lb. .08¼- .08¾
Oxalate, bbls.....lb. .44 - —
Salicylate, bbls., kgs.....lb. 1.10 - —
dms. .....lb. 1.13 - —
Sulphate, nat., 92% min., air-floated, 300 mesh, c.l., works..ton.52.00 - —
l.c.l., works.....ton.54.00 - —
Strophanthin, bots.....oz.30.00 -.57.00
Strophanthus seed, Kombe, bg... lb. 2.65 - 2.70
Styrolyl acetate, bots.....lb. 2.50 - 3.10
Strychnine, cns., 100 ozs.....oz. .61 - —
Acetate, cns., 100 ozs.....oz. .88 - —
Arsenate, cns., 100 ozs.....oz. .91 - —
Arsenite, cns., 100 ozs.....oz. .88 - —
Glycerophosphate, cns., 100 ozs. oz. .89 - —
Hydrochloride, cns., 100 ozs.oz. .88 - —
Hypophosphite, 25-oz. cns., 100 ozs..oz. 1.00 - —
Nitrate, 100 ozs..... .....oz. .82 - —
Phosphate, 100 ozs.....oz. .89 - —
Sulphate, cryst., cns., 100 ozs. oz. .58 - —
powd., cns., 100 ozs.....oz. .48 - —
Sucrose octa-acetate, C.P. grade, bbls., l.c.l., works..lb. .55 - —
denat., bbls., l.c.l., works..lb. .45 - —
tech., bbls., l.c.l., works..lb. .40 - —

TITANOX
THE WHEEL HORSE OF THE PAINT INDUSTRY
Our Paint Service Department offers technical cooperation.
TITANOX
TRADE MARK
THE WHEEL HORSE OF THE PAINT INDUSTRY CARRIES ON!

Mother Nature Still Gives the Most Revealing PIGMENT TESTS

Heat and cold, sun, rain and ice encountered over a long period tell the true value of a pigment in exterior finishes. At the TITANOX proving ground, Sayville, L. I., testing goes on endlessly.

Here are some of the facts produced:

- **House paints, industrial, sign and marine enamels** have high hiding, exceptional whiteness and brightness with moderate chalking when pigmented with TITANOX-AA (titanium dioxide).
- **Tinted exterior finishes** show notable resistance to chalking and fading when TITANOX-ANC is used.
- **Low-cost outdoor paints** have great durability when formulated with TITANOX-RC (rutile calcium pigment), representing the highest value in composite white pigments.
- **Light-tinted exterior paints** are highly resistant to cracking, peeling and color changes when basic colors are reinforced by TITANOX-L (lead titanate).

Use these fine pigments in your exterior coatings with assurance that each will give you the greatest satisfaction obtainable in its specific field.

TITANIUM PIGMENT CORPORATION, *Sole Sales Agent*
111 B'way, New York, N. Y. • 104 So. Michigan Ave., Chicago, Ill. • 350 Townsend Street, San Francisco, Calif. • 2472 Enterprise Street, Los Angeles, Calif.

Sugar coloring (see Caramel coloring)
Sugar of milk (See Milk sugar)
Sulphadiazin, 100-lb. dms.....lb. 13.00 - —
Sulphaguanidin, 100-lb. dms..lb. 5.50 - —
Sulphanilamide, bots.....lb. 1.45 - —
fib. dms.....lb. 1.00 - 1.10
Sulphapyridin, powd., bots., tins, lb. 5.00 - 5.30
Sulphathiazole, dms.....lb. 3.50 - —
smaller lots.....lb. 3.60 - 4.00
Sesquihydrate, prices same as sulphathiazole.
Sulphonethylmethane, kgs.....lb. 6.75 - 6.85
Sulphonmethane, kgs.....lb. 5.25 - 5.35
Sulphur, crude, bgs., c.l., works, 100 lbs. 1.65 - —
l.c.l., works.....100 lbs. 2.00 - 2.15
bulk, mines, contracts.....long ton. 16.00 - —
flour, comm'l 99½%, bgs., c.l., works..100 lbs. 1.65 - —
l.c.l., works.....100 lbs. 2.00 - 2.15
precipitated, USP, bbls., kgs., lb. .18 - .30
refined, flour, extra fine, bgs., c.l., works..100 lbs. 2.90 - —
l.c.l., works....100 lbs. 3.25 - 3.40
heavy, bgs., c.l., works.. 100 lbs. 2.60 - —
l.c.l., works....100 lbs. 2.95 - 3.10
light, bgs., c.l., works... 100 lbs. 2.70 - —
l.c.l., works....100 lbs. 3.05 - 3.20
flowers, USP, bgs., c.l., works..100 lbs. 3.05 - —
l.c.l., works....100 lbs. 3.40 - 3.55
Refined sulphur in bbls., 35c. higher.
rock, bbls., c.l., works.... 100 lbs. 2.20 - —
l.c.l., works.....100 lbs. 2.55 - 2.70
roll, bbls., c.l., works.100 lbs. 2.40 - —
l.c.l., works.....100 lbs. 2.75 - 2.90

Sulphur, chloride, 55-gal. dms., c.l., works..lb. .63 - .03½
l.c.l., dms., works...lb. .04 - .04½
10-gal. dms., c.l., works..lb. .07 - .07½
l.c.l. .....lb. .08 - .08½
Dioxide, liquid, cyls., works.lb. .07 - .08
multi-unit, cars, works.lb. .04½- .06
tanks, works.....lb. .04 - .06
refrigeration, cyls., works.lb. .13 - .21
multi-unit cars, works..lb. .06½- —
Iodide, bots., jars.....lb. 3.90 - 4.11
Sumac extract, No. 1, bbls...lp. .08 - —
No. 2.....lb. .07 - —
stainless, bbls.....lb. .09 - .11
Berries, bgs.....lb. .12 - .13
Sunflower seed, Calif., large, bgs. lb. .10 - .10½
medium, bgs.....lb. .09½- .10
poultry, bgs.....lb. .09 - .09½
Superphosphate,[1] single, gran., 2c. per unit-ton higher than pulverized.
pulverized, run-of-pile, under 22% a.p.a., bulk, producing points, Baito..... unit-ton. .64 - —
Florida .....unit-ton. .59 - .84
others .....unit-ton. .55 - .84
delivery points, Ariz., Calif., Colo., Ida., Kans., Nev., N.M., Ore., Utah, Wash., 88½c. per unit-ton plus frt. charge from Anaconda, Mont., in excess of $3.03 per ton.
guaranteed 18%, 19%, or 20%, a.p.a., 1½c. per unit-ton higher.
triple, 40% and more a.p.a., bulk, producing points, Florida .....unit-ton. .62 - —
South Carolina..unit-ton. .63 - —
Tennessee .....unit-ton. .70 - —
other States and D.C., 62c. per unit-ton plus frt. charge for 45% from E. Tampa, Fla.

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Talc, grd., dom., aluminum-flake type, bgs., c.l., works. ton. 14.50 -24.50
l.c.l., works.....ton. 16.50 -30.00
Calif., bgs., c.l., works..ton. 17.50 -43.00
N.Y. fibrous, coarse, off-color, bgs., c.l., works...ton. 13.00 - —
fine, 325 mesh, 93-94%, bgs., c.l., works..ton. 13.00 -18.00
98-99.5%, bgs., c.l., works..ton. 15.25 -19.25
99.85-99.95%, bgs., c.l., works..ton. 17.00 -21.00
Pennsylvania, bags, c.l., works..ton. 11.00 -13.50
l.c.l., works.....ton. 12.00 -14.50
Vermont, bgs., c.l., works.ton. 14.00 - —
l.c.l., works.....ton. 15.00 - —
imp., Canad., bgs., c.l....ton. 24.00 -30.00
Tallow,[1,6] edible, tanks.....lb. .09½- —
inedible, extra, loose.....lb. .08½- —
special, loose.....lb. .08½- —
sulphonated, 85% (24% fat), dms., c.l..lb. .05¾- —
l.c.l. .....lb. .06¾- —
50% (43% fat), dms., c.l....lb. .06¾- —
l.c.l. .....lb. .07¾- —
50% (43% fat), dms., c.l..lb. .07¾- —
l.c.l. .....lb. .08¾- —
Tamarind, No. 1, bbls.....lb. .10 - .12
kegs .....keg. 7.45 - —
Tankage, animal, feed., 9-11% ammon., bulk..unit-ton. 5.10 - —
Chicago .....unit-ton. 5.53 - —
fert. grd., 9% ammon., 10% b.p.l., bulk..unit-ton. 4.00&.10
10-11% ammon., 15% b.p.l., bulk, Chicago..unit-ton. 4.00&.10
Tansy leaves, bls.....lb. .23 - .24
Tapioca flour, Brasil, bgs.....lb. .03¾- .04¼
Java, bgs.....lb. .04¾- .07¼
Tar acid oil,[6] 16%, dms., c.l., works..gal. .27½- —
l.c.l., works.....gal. .29½- —
25%, dms., c.l., works....gal. .31½- —
l.c.l., works.....gal. .33½- —
Pine, retort, dms., East....gal. .30 - .33
tanks, East.....gal. .24½- —
Tarragon herb, bgs.....lb. 1.70 - 1.75
Tartar emetic, tech., gran. or powd., bbls., kgs..lb. .47¾- .48
dms. .....lb. .48½- .51
USP, powd., bbls.....lb. .52¾- .53
Terpin hydrate, cryst., bbls., dms. lb. .70 - .75
powd., bbls., dms.....lb. .75 - .80
Terpineol, dms.....lb. .85 - .90
alpha (see A).
Terpinyl acet., extra, cns., dms.lb. .90 - 1.13
prime, cns., dms.....lb. .75 - 1.05
Terra alba (see Gypsum).
Tetrachloroethane, dms, works.lb. 08 - .08¼
Tetrachlorethylene, N.F. VI, 55-gal. dms., works..lb. .20 - .21½
smaller dms., works.....lb. .23½- .25½
tech. (see Perchloroethylene).
Tetralin, dms.....lb. .19 - —
Tetrasodium pyrophosphate (see Soda pyrophosphate).
Thallium sulphate, 99%, bots., works..lb. 12.50 - -
Theobromine,[3,6] makers, primary distrib., dms., 25-lb. lots..lb. 2.80 - —
smaller lots.....lb. 2.90 - 3.00
Thiamine hydrochloride,[6] bots., cns., 100 grams..gram. .32 - —
smaller lots.....gram. .35 - —
Thiocarbanilide, dms.....lb. .24 - —
Thiourea, CP, dms.....lb. .55 - .56
Thorium nitrate, cn., works...lb. 2.00 - —
Thyme,[1] French bls.....lb. .89 - 1.03
Morocco, bls.....lb. .21 Nom.
Spanish, bls.....lb. .24½- .25½
Thymol, cns.....lb. 2.75 - 3.00
Iodide, bots.....lb. 3.85 - 4.19
dms.....lb. 3.40 - 3.80
Tikitiki (see Rice bran).
Timbo root,[3,6] (see Cube root).
Tin chloride, anhydrous.....lb. No stocks.
Crystals, bbls., bgs.....lb. No stocks
Metal,[1,6] Straits.....lb. .52 - —
Oxide, bbls.....lb. No stocks
Tetrachloride, anhyd., dms., works..lb. .31 - .35
Titanium dioxide,[3] chalk-resistant, bgs., c.l., dlvd..lb. .15 - —
l.c.l., 5 tons one deliv., dlvd..lb. .15½- —
smaller lots, dlvd....lb. .15½- .15¾
nonchalking, bgs., c.l., dlvd. E..lb. .16½- —
nonchalking, bgs., l.c.l., 5 tons one deliv., dlvd..lb. .16¾- —
smaller lots, dlvd....lb. .17 - .17¼
plain, bgs., c.l., dlvd....lb. .14½- —
l.c.l., 5 tons one deliv., dlvd..lb. .14¾- —
smaller lots, dlvd....lb. .15 - .15¼
Pigment, barium base, bgs., c.l., dlvd..lb. .05¾- —
l.c.l., dlvd.....lb. .06 - —
calcium base, bgs., c.l., dlvd. lb. .05½- —
l.c.l., dlvd.....lb. .05¾- —
calcium-rutile base, bgs., c.l., dlvd..lb. .05½- —
l.c.l., dlvd.....lb. .05¾- —
magnesium base, bgs., c.l., dlvd..lb. .05¾- —
l.c.l., dlvd.....lb. .06 - —
Titanium dioxide and pigment in bbls. ¼c. higher; Pac. cst., ¼c. higher, c.l., dlvd., l.c.l., ex whse.
Tetrachloride, CP, dms., works, 55-gal..lb. .57 - —
smaller pkgs., works.....lb. .65 - 1.25
technical, 55 gal. dms., works. lb. .22 - —
smaller pkgs., works.....lb. .40 - 1.00
Tolu balsam, cns.....lb. .80 - .85
Toluene (see Toluol).
Toluidin base, distilled, kgs...lb. .96 - —
mixed, dms.....lb. .26 - —
Toluol[6] (toluene), 2° indus., dms., return...gal. .33 - —
tanks, E. of Omaha, frt. alld. to 2c. per gal..gal. .28 - —
West, Minnequa, Colo...gal. .28 - —
1° nitration, dms., return...gal. .34½- —
tanks, E. of Omaha, frt. alld. gal. .29½- —
West, Minnequa, Colo...gal. .29½- —
Tonga, 50% bark and vine, bbls.lb. .90 - .95
Tonka beans, Angostura, cks..lb. 2.50 - 2.80
Brazilian, Surinam, cs.....lb. .90 - .95
Totaquine,[1] USP XII, 100 oz...oz. .35 - —
25 oz.....oz. .36 - —
Triacetin, dms.....lb. .36 - —
Triamyl borate, dms., works....lb. .33 - —
Triamylamine, dms., c.l., works. lb. .99 - —
l.c.l. .....lb. 1.01 - —
Tributyl citrate, 475-lb. dms..lb. .29 - .31
smaller pkgs.....lb. .34 - .40
Phosphate, dms., l.c.l., dlvd..lb. .47 - —
cns., works.....lb. .51 - —
Tributylamine, dms., c.l., works. lb. .76 - —
l.c.l. .....lb. .81 - —
Trichlorobenzene, dms., c.l., frt. alld..lb. .06 - —
l.c.l., same basis.....lb. .08½- —
tanks .....lb. .07½- —
Trichloroethylene,[3] dms., c.l., works, frt. alld. Zone 1..lb. .06 - —
Zone 2.....lb. .08½- —
Zone 3.....lb. .09 - —
l.c.l., same basis, ½c. higher.
c.l., ex whse, Zone 4.....lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Trichloroethylene zones are:—(1) Conn., Del., Ill., Ind., Ia., Ky., Me., Md., Mass., Mich., Minn., Mo., N.J., N.Y., NC, Ohio, Pa., R.I., Tenn., Vt., Va., W.Va., Wis., Omaha, K.C., Kan.; (2) Ala., Ark., Fla., Ga., Kan., La., Miss., Neb., N.D., Okla., S.C., S.D.; (3) Col., Mont. (E), N.M., Tex., Wyo; (4) Ariz., Cal., Ida., Mont. (W), Nev., Ore., Utah, Wash.
Tricresyl phosphate,[6] CP., cns., works..lb. .43½- .54½
dms., c.l., dlvd.....lb. .37½- —
l.c.l., dlvd.....lb. .40½- —
tech., cns., works.....lb. .25½- .43½
dms., c.l., dlvd.....lb. .25 - .31
l.c.l., dlvd.....lb. .25½- .31½
tanks, dlvd.....lb. .24 - .30
Triethanolamine,[6] dms., c.l., works. lb. .19 - —
l.c.l., works.....lb. .20 - —
tanks, works.....lb. .16 - —
Triethyl phosphate, cns.....lb. .46 - —
Triethylamine, dms., works....lb. 1.16 - —
Triethyleneglycol,[6] dms.....lb. .26 - —
Trimethylamine, dms., c.l., dlvd. lb. .55 - —
l.c.l., dlvd.....lb. .90 - —
Triphenyl phosphate,[3] bbls.....lb. .31 - .32
Tripoli, air-floated, bgs., c.l., works..ton. 21.50 - —
double grd., bgs., c.l., works. ton. 17.50 - —
once-grd., bgs., c.l., works..ton. 16.00 - —
Trisodium phosphate (see Soda phosphate, tribasic).
Tuba root,[3,4] (see Derris root).
Tungsten metal, powd.,[3,5] fin-99.7%, dms., works..lb. 2.60 - 5.40
Oxide, kgs.....lb. No prices
Turmeric root, Alleppey, bgs..lb. .12 - .12½
Madras, bgs.....lb. .11¾ Nom.
Turpentine, gum, dms., ex dock, gal. .75¼- .79¾
wood, d.d., dms., East...gal. .55 - .58
tanks .....gal. .50 - —
steam-dist., dms.....gal. .59 - .62
tanks .....gal. .54 - —

TAM Zircon crucibles are finding wide application for various high temperature applications up to 3500° in non-ferrous melting such as aluminum, platinum, etc. These Zircon crucibles not only resist various acid and alloy reactions, but due to the straight line expansion coefficient of Zircon, exhibit exceptionally good heat shock properties. Refractory bonds consisting of other compounds are not necessary in the manufacture of TAM Zircon crucibles thereby assuring the user of a pure Zircon product.

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U

Unicorn root, false (see Helonias root). True (see Aletris root).
Uranium oxide, black, bgs.....lb. 2.55 - —
yellow, kgs.....lb. 1.65 - —
Urea, dom., 46% N., bgs., c.l., works or ship. pts..ton.75.00 - —
l.c.l., ship. pts.....ton.77.50 -85.00
import, pure, cs.....lb. .12 - —
Fertilizer comp., basis 42% N., bulk, c.l., works or A. or G. ports..ton.57.40 - —
Urea-ammonia liquor, 42% N., bulk, c.l., works or A. or G. ports..ton.121.58 - —
37% N. (insoluble), same basis, ton.127.00 - —
Uva ursi leaves, bls.....lb. .25 - .27

V

Valerian root, Belgian, bls....lb. 1.20 - 1.25
Eastern, bls.....lb. .92 - .93
Valonia, beards, bgs., f.a.s..ton. No prices
Cups, bgs., f.a.s.....ton. No prices
Vanadium pentoxide, CP, bgs., cns., works..lb. 7.00 - —
tech., dms., works.....lb. 1.10 - —
Vanilla beans,[3] Bourbon, tins..lb. 8.50 - 9.25
Java, tins.....lb. 9.50 Nom.
Mexican, cuts, tins.....lb.10.00 - —
whole, tins.....lb.11.00 - —
Tahiti, white label, tins...lb. 4.00 - 4.25
yellow label, tins.....lb. 3.75 - 4.00
West Indian, tins.....lb. 8.75 - 9.00
Vanillin,[3] tins, makers, primary distrib., ex eugenol, 25 lbs. or more..lb. 2.60 - —
smaller lots.....lb. 2.65 - 2.75
ex guaiacol or lignin, tins, 25 lbs. or more..lb. 2.35 - —
smaller lots.....lb. 2.40 - 2.50
Venice turpentine, artif., cns.lb. .24 - .25
Verdigris, bbls., kgs.....lb. .22 - .23
Vinyl acetate,[6] cbys., wks....lb. .25 - —
dms., c.l., works.....lb. .15 - —
l.c.l., works.....lb. .16 - —
smaller pkgs., works.....lb. .25 - —
Ether, 75 c.c.....bot. 1.30 - —
50 c.c.....bot. .73½- —
25 c.l.....bot. .45½- —
Virosterol (irradiated ergosterol). mil units. .16 - .20
Vitamin A (see Oils, codliver, halibut-liver).
B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B complex, natural (see Rice bran and Yeast).
C (see Acid, ascorbic).
D (see Oils, codliver, halibut-liver, viosterol).
E (see Alpha Tocopherol).
G (see Riboflavin).
P-P (see Acid, nicotinic, and Nicotinamide).
Violet, methyl, toner (see M).
V.M.P. naphtha (see Petroleum, naphtha, v.m.p.).

W

Wahoo, root bark, bls.....lb. .45 - .46
bgs., Virginia ship. pts..lb. .47 - —
Tree bark, bls.....lb. .28 - .30
Virginia ship. pts.....lb. .24 - —
Wattlebark, bgs., f.a.s.....ton.42.00 -44.00
Extract, liquid, bbls.....lb. .05¾- —
tanks .....lb .05¼- —
solid, bgs.....lb. .04475- .0460
Wax, amorphous, 160°-165° m.p., amber, ctns., 30 tons, yr. cont., group 3, works...lb. .14¼- —
smaller lots.....lb. .14½- .15¼
black, ctns., 30 tons, same basis..lb. .12¾- —
smaller lots.....lb. .13 - .13¾
white, ctns., 30 tons, same basis..lb. .24¾- —
smaller lots.....lb. .25 - .25¾
Wax, amorphous, 180°-185° m.p., amber, ctns., 30 tons, same basis..lb. .16¼- —
smaller lots.....lb. .16½- .17¼
180°-185°, black, ctns., 30 tons, same basis..lb. .14¾- —
smaller lots.....lb. .15 - .15¾
white, ctns., 30 tons, same basis..lb. .28¾- —
smaller lots.....lb. .29 - .29¾
Bayberry, bgs.....lb. .25 - .26
Bees,[1] bleached, USP white, bricks, bgs., ton..lb. .58 - —
discs or cakes, bgs., ton, lb. .60 - —
ctns, ton.....lb. .61 - .63
slabs, bgs., ton.....lb. .57 - —
yellow, crude, Afr., bgs., ton, lb. .37½ —
Cent. or So. Amer., sun-bleachable, bgs., ton.. lb. .44¾- —
unbleachable, bgs., ton, lb. .41½- —
ref'd, USP, bricks, bgs., ton..lb. .53½- —
discs, bgs., ton.....lb. .55½- —
ctns., ton.....lb. .56½- .58½
rounds or squares, bgs., ton..lb. .57½- —
ctns., ton.....lb. .59½- .60½
slabs, bgs., ton.....lb. .52½- —
Candelilla,[1] crude, bgs., ton, lb. .38 - —
smaller lots.....lb. .39 - .48
powdered, 20 mesh, 5c. per lb. extra; 80 mesh, 5½c.; 100-200 mesh, 6c.
refined, bgs., ton.....lb. .44 - —
smaller lots.....lb. .45 - .54
Carnauba,[1] chalky No. 3, bgs., ton..lb. .71¼- —
smaller lots.....lb. .72¼- .81½
North Country No. 2, bgs., ton..lb. .75½- —
smaller lots.....lb. .76¼- .85¾
No. 3, bgs., ton.....lb. .73¼- —
smaller lots.....lb. .74½- .83½
refined, bgs., ton.....lb. .76¾- .80
smaller lots.....lb. .77¾- .90
Wax, carnauba, yellow, No. 1, bgs., ton..lb. .83½- —
smaller lots.....lb. .84½- .93¼
No. 2, bgs., ton.....lb. .81½- —
smaller lots.....lb. .82½- .91¼
No. 3, bgs., ton.....lb. .79 - —
smaller lots.....lb. .80 - .89
powdered (same differentials as candililla)
Ceresin, dom., 138°-140° m.p., bgs., ton..lb. .13½- .14
jobbing lots.....lb. .14½- .15
150°-160° m.p., bgs., 1 ton, lb. .15½- .16
jobbing lots.....lb. .16½- .17
160°-170° m.p., bgs., 1 ton, lb. .16½- .17
jobbing lots.....lb. .17½- .18
Japan, cs.....lb. No stocks
Montan, bgs.....lb. No stocks
Ouricury,[1] bgs., ton.....lb. .49½- .51¾
smaller lots.....lb. .50½- .61¾
powdered (same differentials as candelilla)
refined, bgs., ton.....lb. .62 - —
smaller lots.....lb. .63 - .72
Paraffin (see under P)
Spermaceti, blocks, cs.....lb. .26 - .27
cakes, cs.....lb. .27 - .28
White lead (see Lead, white)
White pine bark, natural, bls., lb. .04 - .07½
rossed, bls.....lb. .07 - .10
N. C., ship. pts.....lb. .07 - —
White precipitate,[3] powd., dms., 50 lbs. or more..lb. 2.54 - —
Whiting, chalk, dry-grd, bgs., c.l..ton.18.00 -22.00
l.c.l. .....ton.20.00 -24.00
ton.21.00 -25.00
l.c.l. .....ton.25.00 -29.00
gilders, bolted, bgs., c.l., ton.20.00 -24.00
l.c.l. .....ton.21.00 -25.00
extra-bolted, bgs., c.l..ton.22.00 -26.00
l.c.l. .....ton.23.00 -27.00
Paris white, bgs., c.l....ton.24.00 -28.00
l.c.l. .....ton.25.00 -29.00
Limestone, dry-grd., 325 mesh, bgs., 40 tons, N.E. wks. ton. 6.00 - —
smaller lots, N.E. wks. ton. 7.00 - 9.00
wet-grd., air-floated, 300 mesh, 99¾%, bgs., c.l.....ton. 9.25 -10.10
200 mesh, bgs., c.l....ton. 8.60 - 9.50
99% bgs., c.l.....ton. 6.25 - 7.00
water-floated, extra gilders, bgs., c.l.....ton.13.00 - —
gilders, bgs., c.l....ton.12.45 - —
putty grade, bgs., c.l..ton.12.00 - —
Precipitated, bgs., c.l.....ton.14.00 -15.00
l.c.l. .....ton.18.00 -20.00
Wild cherry bark, thick, bls..lb. .06½- .08
rossed, bls.....lb. .15 - .18
thin, bls.....lb. .09½- .10
rossed, green, bls.....lb. .12 - .15
Wild indigo root, bls.....lb. .18 - .19
Witch-hazel extract, dist., NF, bbls..gal. .72 - .75
Leaves, bls.....lb. .07 - .09
Witherite (see Barium carbonate, natural).
Woodflour, 40 mesh, bulk, c.l., N. Tonawanda, N.Y..ton.20.00 - —
60 mesh, same basis.....ton.24.00 - —
80 mesh, same basis.....ton.27.00 - —
100 mesh, same basis.....ton.30.00 -32.00
Woodflour in bags, 25c. each extra, returnable.
Wormseed, American, bgs.....lb. .11 - .12
Levant .....lb. 6.50 - —
Wormwood, bls. .....lb. .50 - .60

X

Xylene (see Xylol).
Xylol[6] (xylene), indus, dms., returns., works..gal. .32 - —
tanks, E. of Omaha, frt. alld. to 2c. per gal...gal. .27 - —
West, Minnesqua, Col....gal. .27 - —
Xylol, 10°, dms., return., works.. gal. .35 - —
tanks, E. of Omaha, frt. alld., gal. .30 - —
5°, dms., return., wks.....gal. .42 - —
tanks, E. of Omaha, frt. alld., gal. .37 - —
3°, dms., return., works....gal. .47 - —
tanks, E. of Omaha, frt. alld., gal. .42 - —
Xylidin, mixed, dms.....lb. .35 - .36

Y

Yara yara, cryst., bots., cns...lb. 1.75 - 2.20
Yeast, brewer's, dry, 50 B units, dms..lb. .35 - —
90 B units, dms.....lb. .40 - —
120 B units, dms.....lb. .45 - —
200 B units, dms.....lb. .55 - —
300 B units, dms.....lb. .72 - —
Yellow, benzidin, bbls., divd...lb. 1.35 - 2.25
Cadmium, CP, import, bxs...lb. 1.35 - 1.40
Lithopone, bbls., ton, E. of Rockies..lb. .05 - —
smaller lots, same basis.. lb. .60 - —
packages, same basis.....lb. .65 - —
Sulphide, orange, kegs., cases, works..lb. 1.10 Nom.
Chrome, CP., bbls., divd., N. of Tenn. and N. C., E. of Miss. R., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts..lb. .16 - —
Chrome yellow, prices are ½c. higher, divd. Ala., Fla., Ga., La. (Shreveport, 1½c.), Miss., N. C., S. C., Tenn., Tex. (Dallas 1½c.; Ft. Worth, 1½c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher divd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Dutch pink, bbls.....lb. .09 - .11
Hanza, bbls., same basis as chrome..lb. 1.27 - —
primrose, bbls., same basis.lb. 1.75 - —
Mercury oxide, bbls., 1,000 lbs.lb. 2.57 - —
smaller lots.....lb. 2.60 - —
Ocher, American, golden, bbls., works..lb. .04½- .06½
yellow, bbls., works.....lb. .02 - .02½
French type, bbls., c.l....lb. .0645- —
l.c.l. .....lb. .0665- —
Yellow, oxide, nat., bbls., c.l., f.o.b. Bethlehem, Easton, Pa...lb. .04½- —
l.c.l., same basis.....lb. .05 - —
synth., bbls., c.l., works...lb. .07 - —
l.c.l., works.....lb. .071 - —
Persian orange (see O).
Zinc, bbls., same basis as chrome..lb. .15 - —
Navy spec. type, bbls., contracts..lb. .15 - —
Yellow dock root, dom., bls..lb. .16 - .23
Yellow root (xanthorisa), bls..lb. .11 - .13
Yerba santa leaves, bls.....lb. .13 - .14
Yohimbine hydrochloride, vls..oz. 2.00 - 5.75

Z

Zein, bgs., 1,000 lbs., works..lb. .25 - —
smaller lots, works.....lb. .30 - —
Zinc acetate, tech., bbls., divd..lb. .16 - .17
USP, bbls., 250 lbs.....lb. .26 - .27
kgs., 100 lbs.....lb. .29 - —
Arsenite,[1] bgs., c.l., frt. alld. E. of Rockies..lb. .11¾- .13¼
l.c.l., same basis.....lb. .12¾- .13¾

—Continued on page 75

ESPECIALLY DEVELOPED FOR FIRE-RETARDANT USE

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- Now available in carload quantities.
- Zinc Borate-3167 was developed especially for fire-retardant and flame-retardant compositions where water-insolubility and low afterglow are requirements.
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  2. In fire-resisting paints — Circular No. 653, Scientific Section, National Paint, Varnish and Lacquer Ass'n, Inc.
  3. It is potentially useful as a fire-retardant in plywood adhesives, plastics, insulating and flame-proof varnishes, rubber, paper, linoleum, etc.
- See U. S. Patent 2,178,625 and related patents.
- Physical Characteristics:

Color	White
Index of Refraction	1.59 - 1.6
Specific Gravity	2.6
Bulking Value	0.045 Gal. per Lb.
Fineness	98% through 325 Mesh Screen
Water Soluble Salts	Less than 1%
Fusion Point	980° C. Approx.

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Splitting War Efforts

Without giving the new WPB chief of civilian supply activities time to fit himself into his official chair, the senate has passed a bill to set up this functioning in an independent agency. This splitting of the most important war effort of supplying the needs of the nation is characterized by its legislative supporters as "a distinct contribution to the war effort."

With a high degree of, perhaps, naivety, the senatorial promoters of the out-of-the-war-plans favor for civilian wishes look for coordination of the efforts of their new agency with those of WPB. They expect the impossible—or they expect the public to believe in fairy-tales. The latter is the more likely state of affairs; because nobody, not even a farm-blocrat, can be so blind to what goes on in the already grievously divided house of war production.

It is argued for the kept-out-of-war civilian supply plan that there is a need to "keep the civilian population healthy and functioning effectively." There has been no reason for complaint in that respect that any governmental agency could remove or avoid. In truth, freeing civilian desires from responsibility in connection with the war effort must be expected to lessen the effectiveness of civilian functioning in necessary war production.

There are, perhaps, a scattered few members of the business body of this country who desire that their activities in the customary work of supplying civilian goods be left alone, unhampered by any demands of war and thoughtless of the wishes of those who must get in the war or voluntarily and patriotically go in. But, business as a whole must have a higher concept of its responsibilities in the nation's plight. There are complaints of alleged inequities in allocations, the faults in most instances deriving from the overlooking of necessary, informative details in making applications. There is a bit of grousing here and there over the refusal of WPB to permit accumulated stocks to be run into ready markets, the dissatisfaction most frequently arising from lack of information on the whole picture of which the commodity involved is a part. But, it is encouraging to believe, on the basis of substantial evidence, that the great majority of business does not seek privileges and advantages at the risk of the nation's war efforts; does not desire to be set apart from these war efforts to pursue its own ends; is opposed to congressional or other preferment which will enable it to dodge its responsibilities in the nation's peril. Whatever the motive of the forty-four senators who voted to give civilian supplies a preferred, extramartial status, American business just isn't built that way.

—O-P-D—

Demand or Consumption

Semantics is one of the worst plagues of mankind. The problems of the world would be greatly simplified and its troubles substantially reduced if everybody on all occasions used the same word, and only the one word, to mean a certain thing. The economics of business would be much more readily understood and easily directed if the common usage had but one word as the corrolary of production. As it is, with an indiscriminate confusing of the terms, "demand," "distribution," and "consumption" in that respect, it is not to be wondered that economic calculations so frequently go awry.

In every study of wartime and postwar business potentialities and practicabilities, there is some comparison of the relation of the inflow of goods to the outflow on the basis of present trends, past records, and future guesses. The outflow is generally referred to as demand—when what is meant is consumption. There is no such a thing as even an approximate measure of demand.

The difference between demand and consumption is set by distribution and cost. The human desire to possess, that is, demand, has no limits. The human ability to get is hedged about by a number of boundaries. Chiefly, these are the two just mentioned. Another difference between demand and consumption arises from the widely prevalent practice of narrowing selections in respect of design, color, flavor, and other physical characteristics of a commodity.

All these factors of distinction are aggravated in wartime, but cost takes on a lesser importance because the general buying capacity is increased. It is not good business, however, to consider only that change in an attempt to translate current relations of inflow and outflow into terms of postwar potentialities. And it is not sufficient to essay the estimation of postwar consumption solely on the basis of the probable surviving surplus of wartime buying capacity; the hampering influence of inadequate, costly distribution is not to be disposed of so easily.

The problems of today, as well as those of tomorrow, will be better solved if, in their solving, production and demand are kept in their place of potentiality, and the calculating is done on the basis of supply and consumption, both of which can be concretely measured, when due consideration is given to distribution and cost. It will help much, of course, if those who now and then and thenceforth discuss these things will make the proper distinctions between production, which is potential, and supply, which is on the spot, and between demand, which is abstract, and consumption, which anybody can count. The measure of progress will be that of the ability so to manipulate distribution and costs as to narrow the differences.

—O-P-D—

More Knowledge Would Help

There is a proposal in Congress to set up another cabinet office—the Department of Industry. A similar idea was advanced in these columns at least a decade ago. It was not herein advocated that a new department be set up; the suggestion was that the Department of Commerce, the Department of Labor, and some parts of several other departments be combined as a Department of Business. There is already too much division of fundamental functioning in Federal government; apparently everybody desires primarily to be doing what somebody else is supposed to do. The results are just what can be expected.

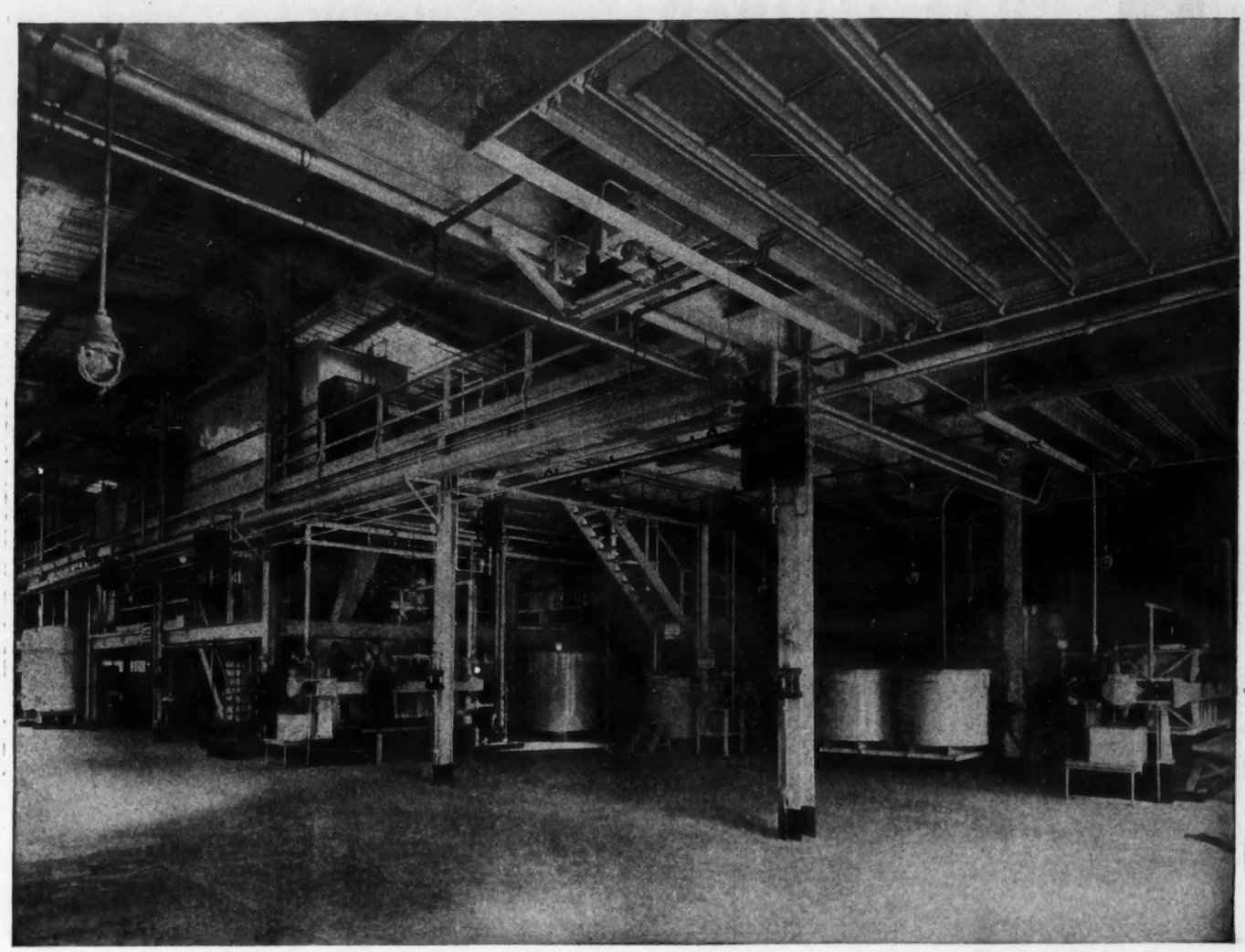
There will be no Department of Industry in the cabinet for a couple of years anyhow. But, there should be a deal of coordinating and reshuffling of cabinet duties and their doing now. The program of wartime supplies from foreign sources is one good example of what is being done wrongly. There is need in this for a large measure of correlation and coordination and also for adequate information on what is being done and why. One of the major faults of the Office of War Information is its failure to keep business informed of the business needs of the war.

In more ways than one, with respect to the business of war supplies from foreign sources, the major governmental department of business is the Department of State. The trouble is that its underlings who are entrusted with the delicate task of fitting war supplying into the good neighbor policy all too frequently do not know what is good or what is neighborly—and nobody tells OWI to tell them.

Public sentiment has a lopsided influence on the good neighborly supplying of war needs. As represented in the public press it clamors for coffee and caoutchouc and castor beans; when what the country needs is soapmaking oils and bugkilling roots. The results are bewildering. Perhaps, if the whole picture were properly exhibited by OWI, there might be some pattern to the patchwork; as it is there isn't.

Talk is that there are enough castor beans stored in these parts to supply dehydrated castor oil for all possible needs over the next six months. These beans or the oil therefrom may not be sold—WPB orders: well-based, perhaps, but nobody knows. There isn't enough babassu oil or cohune oil or nuts coming up from the castor-bean country to make a cake of soap for every left-handed laundress in Louisiana. The people of those regions are no better pleased than are those of these with this situation. There are many reasons why all the business-doing agencies of the war program should begin to advertise their activities. What nobody knows hurts everybody.

OPD—5-17-1943



Vitamins for Victory

• In all wars since history began disease has been the cause of more casualties, both military and civilian, than the weapons of the enemy. During the last World War it began to be recognized that some of these diseases, such as scurvy, were caused by a definite deficiency of some essential ingredient in the diet while others probably spread because of lowered resistance of the population due to this and other dietary lacks. Because of their relationship to life, these essentials were termed vitamins. Since practically nothing was known about them at the time, little could be done toward correcting these deficiencies.

Since then science has made tremendous strides in the chemistry of vitamins. The structure of most of those isolated has been determined and methods for synthesizing many of them developed.

The nations of the world have not been slow to recognize the importance of the vitamins. In her rearmament program Germany included factories for their production along with those for manufacturing guns, explosives and other munitions of war. One important ingredient in the emergency ration of the German parachute troops has been tablets of synthetic Ascorbic Acid (vitamin C). Our own Government has also recognized the importance of this vitamin and has included a product containing synthetic Ascorbic Acid in the ration of our Armed Forces.

The United States and the British Empire have also included the maintenance of civilian health and morale in their war plans. Enriched flours and breads, to which a number of the vitamins together with certain minerals have been added, have received official sanction. This development has been hampered by an insufficient supply of one of the vitamin ingredients – Riboflavin (vitamin B_2).

Chas. Pfizer & Co., Inc. has been one of the largest producers of Ascorbic Acid (vitamin C) for several years. There has been a continual increase in our production of this synthetic vitamin and plans are now in the process of consummation which will still further enlarge our productive facilities.

After a research program of several years, the production of Riboflavin (vitamin B_2) was started by our Company in 1940. At the present time we are bending every effort toward a great increase in the size of our productive facilities in order to assist in supplying the large quantities of this essential vitamin which are needed.

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Heavy Chemicals

Demand Broadens for Heavy Chemicals — Export Trade Active —OPA Meets Sulphuric Acid Producers to Discuss Maximum Price Regulations

Buying activity assumed more liberal dimensions in the heavy chemical market last week. While demand was primarily for government requirements enough miscellaneous civilian orders were pumped into the market to create considerable activity. Sales were fairly general and demand was not as spotty as recently noted. In several instances, manufacturers asserted that surplus stocks were being reduced and that inventories revealed a healthier condition. Labor shortage, transportation difficulties and unseasonal weather have exerted dual influences upon demand and supply which at present have not proved so unsatisfactory.

Potash varieties have shown a slow but persistent increase in demand, particularly in caustic and carbonate. Chlorate of potash remained independent of the others and the same was true of perchlorate. Demand for the latter two has been urgent all season and producers have been taxed to capacity to meet requirements. The scarcity of oxalic acid was pronounced at the close. Heavy buying of this chemical for prompt and forward was one of the market's salient features. Producers asserted there was no scarcity of bicarbonate of soda. Export orders have temporarily wiped out warehouse supplies but relief was tendered in a day or so.

Export buying continued active with the week's volume showing sizable dimensions. The acids, caustic soda and soda ash commanded the lead from exporters. Mexico and South American countries were included in the active buying movement.

OPA had one meeting last week and will hold a series of meetings throughout the month with producers of sulphuric acid for discussing maximum price regulations. OPA has announced that distributors of copper sulphate may charge ceiling prices on their retail sales of this chemical in quantities less than 300 pounds for use as an insecticide or fungicide.

Paper production as a percentage of six-day capacity was 91.7 in the week ended May 8, according to the American Paper and Pulp Association. This compares with 65.7 in the previous week and 98.2 percent a year ago.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
170.0	170.0	170.0	170.2

Index numbers compiled from twelve typical acids on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
116.0	116.0	116.0	116.0

Market news that may have developed after this report was sent to press will be found on page 4.

Arsenic. — Steady shipments going forward for war and agricultural wants. Market held steady position.

Bauxite.—Importations of moderate dimensions were recorded last week. Market registered no price changes.

Bleaching Powder. — Definite improvement in demand developed since turn of the month. Government agencies reported buyers.

Calcium Chloride.—Spring demand has continued backward. After heavy consumption during winter months, market has remained in a relatively quiet condition.

Copper Sulphate. — OPA has announced that distributors may charge ceiling prices in their retail sales of quantities less than 300 pounds when sold for use as an agricultural insecticide or fungicide. Market shows seasonal degree of activity with tendency toward increased buying. WPB states that to date 197,000,000 pounds of idle and excessive copper both in primary and fabricated forms have been allocated for war use.

Chlorine. — Market remained in rather liberal supply with demand spotty.

Potash Carbonate.—Consuming demand has shown tendency to expand of late. Makers plants were running to full capacity and supplies were sufficient to meet wants.

Potash Caustic. — Noticeable improvement in demand has developed since the turn of the month. Prominent sellers reported broader sales for both large and small quantities. Supplies adequate to meet demand.

Potash Chlorate.—Regardless of increased production, market in this section remained tight with former prices fully sustained.

Potash Perchlorate. — Demand active for commercial explosives and pyrotechnics. Market closed in tight position.

Soda Ash.—Demand improved for soda ash last week. Miscellaneous consuming inquiries revealed a tendency to broaden with better buying noted for both home and export.

Soda, Bicarbonate.—Production was fully adequate to meet the current extent of consuming demand and there was no indication of a scarcity in this section. At distant points in the South, occasional shortages have existed on spot but these did not indicate any falling off in output. Export demand has remained active and while local warehouse supplies have not always been sufficient to meet immediate wants, there has been no difficulty in securing prompt shipments of car lots. Department of Agriculture has purchased 15,024 pounds in cartons at 3½c., Syracuse, N. Y.

Soda Caustic.—Better buying featured the market last week and shipments were of larger dimensions. Sellers were convinced that any surplus stocks would shortly be absorbed. Aside from an improved call for domestic use, there was an active inquiry for export account.

Soda Nitrite.—Supplies were rather liberal with consuming demand slow. The color makers have not shown much interest of late. This chemical entered into the manufacture of greens which are not moving broadly at this time.

Tungsten.—Purchase and production of a greater amount of tungsten high-speed steel than previously permitted have been authorized by WPB to accomplish necessary use of molybdenum. Moderate imports of ore were recorded last week.

Acids

Acetic.—No improvement in buying conditions could be noted last week. Consuming demand was ahead of supply and the market retained a firm position with inquiry active for home and export requirements.

Formic.—Miscellaneous inquiries of satisfactory dimensions were reported. Supplies were limited with the market inclined toward a tight position.

Association Meetings:—

National Association of Insecticide and Disinfectant Manufacturers, Statler hotel, Cleveland, June 7 and 8.

American Electroplaters Society, Buffalo, N. Y., June 7 to 9.

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 9

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Muriatic.—Demand was sufficiently active to tax production. Heavy shipments for war and civilian requirements with inquiry active.

Nitric.—Continued heavy absorption of output has kept the market in a relatively tight condition. Former quotations were firmly sustained.

Oxalic.—Recent heavy buying has brought this market into a tight condition. Round lots were scarce and difficult to obtain for anything like prompt shipment.

Sulphuric.—OPA states that a series of meetings with producers will be held during the month for the purpose of discussing maximum price regulations. Heavy shipments of acid have been going forward to war plants and fertilizer factories. Demand was reported active at the close of the week.

Insecticides

Production of agricultural insecticides has kept pace with 1942 levels regardless of labor and transportation shortages. As long as crude materials are available this ratio is expected to continue. Plenty of spray and dusting materials have been put in packages for Victory gardens but weather conditions so far have tended to restrict active buying.

Calcium Arsenate.—According to official reports, the supply of this material for the coming season will be the largest ever recorded. Although it is difficult to predict demand, it is assumed that the increased cotton acreage, combined with requirements of crop insurance will inspire a heavy inquiry.

Chloropicrin.—Adequate supplies are expected, although government may take part of production.

Cryolite.—Supplies are larger. According to reliable estimates, there will be 15,000,000 pounds, insecticide quality this year against 6,000,000 pounds in 1942.

Nicotine Sulphate.—Supplies are plentiful. Reported that nicotine compounds will be mixed with other economic poisons in manufacturing mixed dusts which should find wide acceptance for home gardens.

Paradichlorobenzene.—Supplies were short. Demand has kept above production. Principal demand was for moth control.

—O-P-D—

Trade Briefs

Sparex Chemical Company has moved to 107 William street, this city.

Emrich Bothers has moved its offices to 19994 Carrie avenue, Detroit, Mich.

Altis Chemical Company, manufacturer of fine chemicals, is opening an office at 136 Liberty street, this city.

Triumph Explosives Works, Elkton, Md., was damaged by a heavy blast and fires causing the death of twenty employees and injury to about 125 other workmen.

—O-P-D—

Chemical Engineers Discuss War Problems

—Continued from page 7

gave as follows:—Acetylene from hydrocarbons, formaldehyde from hydrocarbons, benzene from petroleum, non-electrolytic chlorine processes, low pressure fixation of nitrogen, hydrolysis of wood, ethyl alcohol from wheat, glycerin by fermentation of molasses, gasoline additives, etc.

Technical Mobilization

Senator H. M. Kilgore, defended his bill for technical mobilization, and a report on the Manpower problem was read by S. D. Kirkpatrick, editor of Chemical & Metallurgical Engineering, which told of the progress that had been made in securing military deferments for engineers and engineering students.

Walker Medalist

Henry F. Johnstone, professor of chemical engineering, University of Illinois, Urbana, Ill., was presented with the 1943 William H. Walker Award of the American Institute of Chemical Engineers for an outstanding contribution to chemical engineering literature.

Senior Student Prize

S. Y. Wong, a senior student at the University of Texas was named recipient of the A. McLaren White national student chemical engineering award. Consisting of a cash prize of $100, the award was presented to Mr. Wong by J. L. Bennett, of the Hercules Powder Company, president of the institute.

Low Grade Manganese

Metallic manganese may now be recovered from the tremendously extensive deposits of manganese ores in South Dakota. The process was described by H. C. Weber and C. H. Davenport of the Massachusetts Institute of Technology. In spite of the fact that many large, low-grade deposits exist in the United States, no suitable techniques have yet been developed for their economic, commercial exploitation.

In view of these considerations, the purpose of their work was to develop a commercially feasible process for the concentration of one of the low-grade manganese ores of the United States. The ore selected was that of the Chamberlain district of South Dakota. The Chamberlain deposit is a surface ore, thus enabling cheap, open-pit mining methods to be employed. Further, the district is well served by rail transportation and, should the need arise, water transportation on the Missouri River would also be available.

Alcohol from Beer

"The Production of Absolute Alcohol from Beer, Application of Ethyl Ether Dehydration and Vapor Re-Use Principle" was discussed by Theodore O. Wentworth, of the Vulcan Copper & Supply Co., Cincinnati, Ohio, and Donald F. Othmer of the Polytechnic Institute of Brooklyn, Brooklyn, N. Y.

The processes reported at a previous meeting for the production of absolute alcohol depending on the removal of water free of alcohol overhead for the first time in distillation practice has been incorporated with several other new distillation operations in a plant unit which will produce 200° proof alcohol from the beer at a steam cost around 20 pounds of steam per gallon. These improvements in distilling technique include the re-use of vaporous heat at several different pressures and alcohol-water concentrations, the use of condenser—boiler and condenser—calandria combinations as well as some improvements in the flow sheet of alcohol purification and in heat transfer equipment. Plant operating data are presented.

Extraction in Perforated Plate

"Liquid Extraction in perforated Plate and Packed Towers" was discussed by Joseph Allerton, of the Cooper Union, New York, Barney O. Strom, of the Monsanto Chemical Company, St. Louis, Mo., and Robert E. Treybal, of the New York University, University Heights New York. A summary of their paper follows:—

A study has been made of the extraction rates, hold-up, and possible through-puts in the extraction of benzoic acid from toluene and kerosene in a perforated plate tower and from kerosene in a tower packed with half-inch carbon rings. Through-puts in the perforated plate tower, when compared with those found in the literature for other towers, are shown to be the best as yet obtained, with the exception of spray towers. The extraction rates for kerosene with the perforated plates were found to be superior to those obtained in the packed tower, while in the case of toluene they may or may not be better, depending upon the design of the plates. By sampling the liquids above and below each plate an operating line, showing the change in concentration of benzoic acid throughout the entire column, was obtained.

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Chemical Allocations Supplement Issued

—Continued from page 7

electrical condensers, enamelled wire. 3. Industrial operations and equipment—coated abrasives, textile bobbins, plating and chemical equipment. 4. Printing and Inks—engineering, drawing and map inks. 5. containers and packaging—food, chemical and medicinal containers, seam sealing containers. 6. Health, safety and scientific uses—fire control equipment, X-ray equipment, scientific instrument cases, precision and navigational, surgical and medical instruments, scientific instruments, precision, navigational, pharmaceutical and medical supplies. 7. Office supplies and equipment—cloth maps and engineering drawings. 8. Non-classifiable—engines (electrical, Diesel and steam), generators.

Allocations were made 100 percent after first adjusting the request in terms of the previous month's disposal of resins, except where the accompanying letter established beyond doubt the minimum needs for the allowable use. In addition to this adjustment there was no allowance for working inventory, in other words, the request was adjusted to what may be considered as the logical or estimated quantity of material that may be used for any given use for one month only. The over-all allocation of allowable uses of essential civilian was 47 percent of the requests. Essential civilian allocations were 1.9 percent of the total resin recommended for authorization.

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Dyestuffs, Textile, and Leather Chemicals

Tight Position of Cornstrach Provokes Considerable Discussion Among Factors in Market for Dyestuffs, Textile, Leather Chemicals—Sizable Quantity of Quebracho Arrives

The extremely tight position of cornstarch was a topic of much discussion among factors in the market for dyestuffs, textile, and leather chemicals last week. In this connection it is interesting to note that the corn grind of eleven refiners of starches, syrups, sugars, and other derivatives of corn for April totaled 10,712,723 bushels. This represents corn ground for domestic use only, and compares with a grind of 10,791,204 bushels in the previous month and 10,947,591 bushels in April of last year.

Lend-lease exports of corn and corn products in the first three months of 1943 amounted to 104,300,000 pounds, and compare with three-month average exports in 1942 of 103,700,000 pounds. Corn owned by Commodity Credit Corporation on March 31 amounted to $42,211,360, against $66,360,185 on March 31, 1942. Loans by CCC outstanding on March 31 amounted to $84,294,546, against $177,822,157 on the same date last year. Through April 30 CCC had completed 47,473 loans on 55,829,570 bushels of 1942 corn in the amount of $43,161,527.41. The average amount advanced was 77c. per bushel. On that same date last year 103,657 loans had been completed on 108,675,781 bushels. The Food Distribution Administration purchased 24,680,400 pounds of cornstarch on May 1 at prices ranging from 2.98c. to 3.165c. per pound.

Arrival of sizable quantities of quebracho extract attracted some attention among tanning maerials factors last week, and a shipment of myrobalans in goodly quantity also was received. Tanners are permitted to continue to put into process during May, June and July a total of 220 percent of their monthly average of raw goatskins, raw kidskins, and raw cabretta skins put into process during 1941. The percentages, which are the same as those for the past six months, are continued by supplementary order M-114-b.

Bichromates continued tight, and the arrival of a shipment of chrome seemed to have little effect insofar as easing the situation was concerned.

Minimum specifications as to gauge, fineness of yarn and construction of full-fashioned hosiery have been set up by the War Production Board in an amendment, effective May 15, to its previous order L-274.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from nineteen typical dyestuffs on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
262.6	262.6	261.2	260.3

Market news that may have developed after this report was sent to press will be found on page 4.

Chemicals

Alumina Acetate.—No new developments in market. Prices continue unaltered.

Alumina Chloride.—Anhydrous material under WPB allocation control. No movements pricewise.

Ammonia Bichromate.—Material in firm position due to heavy war and industrial demands for chrome. Shipment of chrome in goodly quantity just received.

Antimony Salt.—Position unaltered. Prices show no change.

Chrome Acetate.—Tight chrome situation holds market firm.

Potash Bichromate.—War and industrial needs for chrome continue to hold potash bichromate in firm position.

Potash Prussiate. — Demand unchanged from recent levels. Quotations unaltered.

Soda Bichromate.—Material in firm market position in common with other bichromates.

Zinc Dust.—WPB allocations rule. Price structure steady.

Dyestuffs

Annatto. — Prices unchanged from higher levels recently established due to war risk insurance, ocean freight rates, and railroad transportation costs after goods reach this country.

Fustic.—Demand quite good, but still a little behind that of a year ago. Tone firm.

Hematine. — Activity good. Price schedules confirmed.

Logwood.—Material in good demand. Quotations show no change.

Madder, Dutch. — Situation unchanged. Prices same.

Turmeric.—Prices steady at higher levels recently established.

Sizing Materials

Albumen, Blood.—Supplies at satisfactory level. Quotations confirmed.

Albumen, Egg.—Material available in limited quantity at ceiling prices. Provisions made March 23 for certain adjustments in the price of dried whole eggs sold to government procurement agencies have been made retroactive by OPA to March 6. The adjustments provided for certain payments above maximum prices for services performed in connection with the sales.

Dried Blood, Soluble.—Supplies continue adequate. Price schedules unaltered.

Egg Yolk—Market tone firm with offerings very scarce. Lend-lease shipped out in dried form about 15 out of every 100 eggs in the first quarter of this year. Last year the rate was 10 out of every 100.

Starch, Corn.—Market very tight. Government takings causing users to seek more expensive starches as substitutes. Cornstarch quotations show no change.

Starch, Potato.—Position very tight in common with other starches. Supply of potatoes for mills low. Prices firm.

Starch, Wheat. — Heavy demand against light supplies. Tone firm.

Tanning Materials

Chestnut Extract.—Prices at OPA maximums. Demand and supply situations unaltered.

Divi-Divi. — WPB allocations rule. Prices steady.

Myrobalans. — Shipment in goodly quantity just received. Quotations same.

Quebracho Extract. — Sizable shipments just received. Material under WPB allocation control. No movements pricewise.

Spruce Extract.—Material in light supply. Demand continues good. Quotations steady.

Association Meetings:—

Tanners Council of America, Waldorf-Astoria, New York, May 20 and 21.

American Leather Chemists Association, Statler Hotel, Buffalo, N. Y., June 2 and 3.

Current prices on dyestuffs and tanstuffs are given in the alphabetical list of prices beginning on page 9

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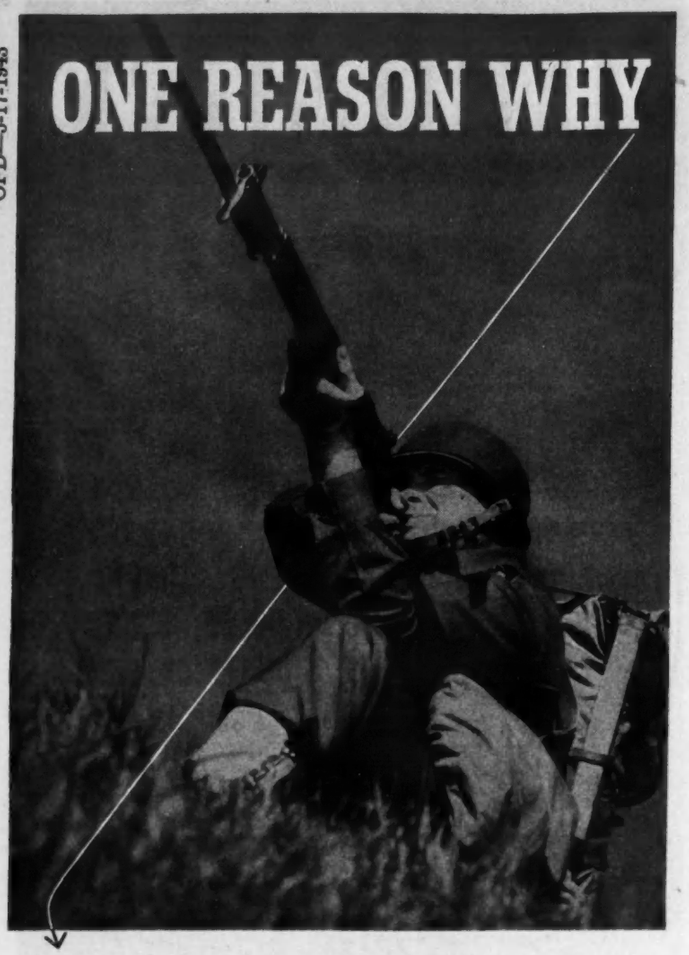
OPD—5-17-1943



deliveries of NAPHTHALENE may be curtailed . . .

Naphthalene, long recognized as one of the most dependable moth preventives known, is also used in the manufacture of plasticizers for smokeless powder. Like many another coal-tar chemical, for which Barrett is a key source of supply, it is needed in ever-increasing quantities for war purposes.

All Barrett's vast facilities and 89 years of manufacturing experience are being utilized to keep production of these vital chemicals at top limits. But so great are war requirements, we ask the indulgence of our customers if deliveries for civilian use are curtailed or delayed.

PHENOLS
CRESOLS
CRESYLIC ACIDS
CHLORINATED TAR ACIDS
BARRETAN*
PICKLING INHIBITORS
BENZOL
TOLUOL
XYLOL
SOLVENT NAPHTHA
HI-FLASH SOLVENT
NAPHTHALENE
PHTHALIC ANHYDRIDE
DIBUTYL PHTHALATE
PYRIDINES
TAR ACID OILS
CREOSOTE OIL
CUMAR* (Paracoumarone-Indene Resin)
RUBBER COMPOUNDING MATERIALS
BARDOL*
HYDROGENATED COAL-TAR CHEMICALS
FLOTATION AGENTS
ANHYDROUS AMMONIA
SULPHATE OF AMMONIA
ARCADIAN* THE AMERICAN NITRATE OF SODA

*Trade-mark Reg. U. S. Pat. Off.

Awarded to the men and women of the Barrett Frankford Chemicals plant for excellence in the production of war materials.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK

Barrett

ONE OF AMERICA'S GREAT BASIC BUSINESSES

Coaltar Chemicals

Completed Arrangements for Government Purchase and Importation Of British Tar Acids Continue to Draw Much Discussion Among Factors in Market for Coaltar Chemicals

Arrangements just recently completed between representatives of government agencies in Washington and London, forming the basis of a plan for the government purchase and importation of British tar acids, continued the topic most discussed in the market for coaltar chemicals last week, with the possible effects on the industry of the threatened coal strike running it a close second. In connection with the tar acid situation, the trade will be interested to learn that a shipment of imported cresylic acid in goodly quantity has just been received.

The market in general showed little change over the past week. Basic products as a whole were again in heavy demand with the anticipated further tightening in benzol causing users of that item to seek substitutes wherever possible. As a result of this, xylol was very much shorter and it is believed that this material may become very difficult to secure in the near future. Phenol continued very scarce and the good seasonal demand for refined naphthalene held that material in very firm position. Coaltar acids and intermediates remained in tight supply and conditions in the market for coaltar colors were about unchanged.

Production of 7,374,154 net tons of steel ingots and castings in April set a new peak for a 30-day month, according to the American Iron and Steel Institute. April tonnage was short of the March record of 7,670,187 tons, but was substantially above output in April, 1942, when 7,121,291 tons were produced.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
129.2	129.2	129.2	130.1

Market news that may have developed after this report was sent to press will be found on page 4.

Basic Products

Benzol.—All indications point to tighter supply situation. Needs of synthetic rubber program and for aviation gasoline in extensive volume. Tone very firm. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 3,738,200 gallons of benzol. Benzol for civilian uses in May has been granted by WPB in full for camphor, monochlorobenzene, dichlorobenzene, anthroquinone, diphenyls, and rubber chemicals and in part for medicinals (80 percent) and solvents (76 percent).

Coaltar.—Market continues tight. Quotations firm. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 14,591,300 gallons of coaltar.

Creosote Oil.—War needs at good level with railroads and utilities active in market and with movement of material for agricultural purposes in sizable volume. Tone steady. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 771,700 gallons of creosote oil.

Cresylic Acid.—Arrangements forming the basis of a plan for government purchase and importation of British tar acids have been completed. Goodly quantity of imported material just received. Market very tight.

Naphthalene.—Seasonal demand for balls and flakes heavy. Tone firm. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 1,727,900 pounds of crude and refined naphthalene.

Phenol.—Heavy war demand leaves supplies available for intermediates very tight. Market tone firm. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 217,000 pounds of phenol.

Pitch.—Market devoid of new developments. Prices unchanged.

Pyridin.—Tone firm. Supply and demand conditions unchanged.

Tar Acid Oil.—WPB allocations rule. No change pricewise.

Toluol.—Material under WPB allocation control with war needs very heavy. Tone firm. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 747,600 gallons of toluol. WPB has granted toluol for essential civilian uses in the following percentages for May:—Dyes and intermediates, 13 percent; solvents, 29 percent; food preservatives, 58 percent; medicinals, 99 percent; and adhesives, 8 percent.

Xylol.—Supplies continue to grow tighter. Material being sought as substitute for other critical basic products. WPB allocations rule. No change in firm price situation. Estimates of byproduct cokeoven operations in week ended May 8 indicate production from that source of 168,800 gallons of xylol, crude and refined.

Chicago, May 12.—Takings of various grades of coaltar bases are holding up at relatively high rates. Inquiry is active also. Call for benzol has been heavy. Most buyers are trying to protect reasonably advanced needs with purchases. Ruling prices are:—Benzol, 90 percent, 15c. per gallon; toluol, 28c.; industrial xylol, 30c.; 10-degree xylol, 27c.; solvent naphtha, 27c.; creosote oil, grade 1, 15½c.

Hydrogenated Solvents

Cyclohexane.—Demand good. Prices continue firm.

Cyclohexanol.—Position unaltered. Quotations confirmed.

Cyclohexanone.—Interest at good level. No change in quotations.

Methylcyclohexanol.—Inquiry continues good with no movements pricewise.

Coaltar Acids

Anthranilic.—Supply level remains low. Prices firm.

Benzoic, Technical.—Market strong. New developments lacking.

Broenner's.—Call fair. No change in prices.

Cleve's.—Demand remains active. No movements pricewise.

Fumaric.—Supplies short. No change in prices.

Gamma.—Consumers showing good interest. Tone firm.

Laurent's.—Inquiry at fair to good level. Quotations steady.

Maleic.—Good interest in tight market.

Malic.—Supplies short. Interest remains good.

Picramic.—No easiness in tight supply situation. Prices same.

Picric.—No change in market tone. New developments lacking.

Salicylic.—Supplies light. Undertone remains firm.

Sulphanilic.—Good interest against tight supplies. Quotations firm.

Other Intermediates

Alphanaphthol.—Demand continues active. No changes pricewise.

Anilin.—Material under WPB allocation control.

Benzaldehyde.—Supplies tight. Quotations unaltered.

Benzidin Base.—Demand remains active. Prices confirmed.

Benzoyl Chloride.—No change in level of consumers' interest. Prices show no alterations.

Dimethylanilin.—Material in tight supply. No movements pricewise.

Current prices on coaltar products are given in the alphabetical list of prices beginning on page 9

Dinitrotoluene.—Supplies are very short. Quotations same.

Diphenyl.—Steady interest. Market position tight.

Diphenylamine.—Supplies tight. Inquiry good. Quotations show no change.

G Salt.—Needs continue in large volume. Prices steady.

Metaparatoluidin.—Material in tight supply. Quotations firmly held.

Nitrobenzene.—No easiness in tight supply situation. Tone firm.

Orthonitrophenol. — Supplies tight due to shortage of raw materials.

Orthonitrotoluene. — Market devoid of new developments. Undertone firm with supplies tight.

Phthalic Anhydride.—Supply situation remains easier due to tight glycerin condition. No change pricewise.

Xylidin. — Demand good against short supplies. Quotations show no alterations.

Coaltar Colors

Again last week little change was noted in conditions in the market for coaltar colors. Dyes going into the printing of military goods continued to move out in large volume. Other shades, however, were in many cases in more than adequate supply.

—O-P-D—

Trade Briefs

John Royle & Sons, manufacturer of textile machinery, Paterson, N. J., has received the Army-Navy production E award,

Robert S. Moore, a native of Canada, has joined the research staff of the Quaker Chemical Products Corporation, Conshohocken, Pa.

Arthur S. Allen, president of the All Color Company, this city, has been named color consultant for the Hinde & Dauch Paper Company, Sandusky, Ohio.

—O-P-D—

Textile Technologists To Hear Dr. Hertel

Dr. K. L. Hertel, of the University of Tennessee, will address the meeting of the American Association of Textile Technologists June 4. He will speak on "New Methods of Measuring and Property of Cotton Fibers."

Shipping Information

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New York Imports

ACID, CRESYLIC—184 dms

AMMONIA CARBONATE—100 dms, Davies, Turner & Co

BARIUM SULPHOCYANIDE—1 cs

CAFFEINE ANHYDROUS—87 cks, 11,700 lbs, National City Bank

CAPSICUM—619 bgs, 20 tons, Standard Bank South Africa

CASTOR BEANS—8,500 bgs, 1,275,000 lbs, Continental Illinois National Bank
3,900 bgs, 594,000 lbs, National City Bank
5,100 bgs, 765,000 lbs, Irving Trust Co
3,388 bgs, 508,200 lbs, Bank of Manhattan Co
5,074 bgs, 761,100 lbs, Commercial National Bank
27,476 bgs, 4,130,400 lbs
3,380 bgs, 507,000 lbs, Union Planters National Bank
5,138 bgs, 770,700 lbs, Wilbur, Ellis & Co

CHALK, PRECIP—600 bgs, H J Baker & Bro

CINNAMON CHIPS—150 bls, 15,000 lbs
QUILLS—56 bls, 5,600 lbs
224 bls, 22,400 lbs, C M Van Sillevoldt

COCOA BEANS—7,000 bgs, 1,400,000 lbs, Rockwood & Co
753 bgs, 150,600 lbs, General Cocoa Co
4,500 bgs, 900,000 lbs, Hershey Chocolate Co
1,491 bgs, 298,200 lbs, Wessel, Kulenkampf & Co
333 bgs, 66,600 lbs, Irving Trust Co
3,000 bgs, 600,000 lbs, Royal Bank of Canada
1,000 bgs, 200,000 lbs, Chemical Bank & Trust Co
6,820 bgs, 1,364,000 lbs, Machado & Co
2,225 bgs, 445,000 lbs, Gillespie & Co
4,110 bgs, 822,000 lbs, Curacao Trading Co
84,000 bgs, 16,800,000 lbs

CUTTLEFISH BONES—20 cs, J B de Macedo

FILTER PAPER—28 cs, H Reeve Angel & Co

GUM, COPAL—228 bgs, P S Busscharet
286 bgs
KARAYA—133 bgs, 26,600 lbs, T M Duche & Sons
133 bgs, 26,600 lbs, Guaranty Trust Co

HAIR, CATTLE—23 bls, National City Bank
CATTLE TAIL—6 bls, Armour & Co
HORSE TAIL—8 cs, S Zeitlin Sons

IPECAC ROOT—60 bgs, 6,000 lbs, S B Penick & Co
40 bgs, 4,400 lbs, Brown Bros Harriman Co
20 bgs, 2,200 lbs, Chase National Bank Trust Co

IRON OXIDE—600 bgs, Reichard Coulston, Inc

LEECHES—12 cs

MEDICINAL PREPARATIONS—43 cs, D C Andrews & Co

OIL, CASTOR—500 dms, 245,520 lbs, Continental Illinois National Bank & Trust Co
CODLIVER—126 bbls, Arista Oil Products Co
360 dms, C T Smith & Co
402 dms, Iceland Trading Co
218 bbls
PALM—1,241 tons, Balfour, Guthrie & Co

PAPRIKA—250 bgs, 27,500 lbs, Morris J Golomback & Co
300 bgs, 33,000 lbs, Judson, Sheldon & Co
100 bgs, 11,000 lbs, Asmus Bros
100 bgs, 11,000 lbs, Continental Importing Co
55 bgs, 6,050 lbs, Canadian Pacific Railway
350 bgs, 38,500 lbs, Norport Trading Co
100 bgs, 11,000 lbs, Archibald & Lewis
150 bgs, 16,500 lbs, Levy & Levis Co
200 bgs, 22,000 lbs, Hudson Tea & Spice Co

SPONGES, LOOFAH—24 bls

TEAWASTE—2,000 bgs, Citro Chemical Co

WAX, BEES—283 blocks, Koster Keunen
84 bgs, Wm M Allison & Co
CARNAUBA—716 bgs, 143,200 lbs, Strohmeyer & Arpe Co
56 bgs, 11,200 lbs, E A Bromund Co
392 bgs, 78,400 lbs, Innis, Speiden & Co
113 bgs, 22,600 lbs, J Henry Schroeder Banking Corp
167 bgs, 33,400 lbs, Marine Midland Trust Co
56 bgs, 11,200 lbs, Wessel, Duval & Co
1,320 bgs, 264,000 lbs, W R Grace & Co
1,119 bgs, 223,800 lbs, American Cyanamid & Chemical Corp
22 bgs, 4,400 lbs, Bank of London & South America
278 bgs, 55,600 lbs, National City Bank
524 bgs, 104,800 lbs, Wm M Allison & Co
338 bgs, 67,600 lbs, Guaranty Trust Co

—O-P-D—

Baltimore Imports

OIL, CRUDE—72,197 bbls, Mexican Petroleum Corp

PHOSPHATE ROCK—4,480,000 lbs

ZIRCON SAND—1,120,000 lbs

—O-P-D—

Obituaries

John H. Barton

John H. Barton, former president of the National Oil Products Company, Harrison, N. J., died of a heart ailment May 9 in Flemington, N. J. He was fifty-three years of age. Mr. Barton had been affiliated with the National Oil Products Company for twenty years, retiring in February, 1940, after serving two years as president. Surviving are his wife and a sister.

William H. Billings

William H. Billings, an executive in Union Carbide & Carbon Corporation, died at the home of his son, William H. Billings, jr., in Charleston, W. Va., May 11, 1943, after a prolonged illness. He was sixty-nine years of age.

Mr. Billings was born in Boston in 1874. He was for many years a resident of Maplewood, N. J., and during the past ten years lived in Bronxville, N. Y. Mr. Billings, one of Union Carbide & Carbon Corporation's oldest employees in terms of service, had been associated with the corporation since its organization in 1917. Prior to that time he was with the Union Carbide Company in Niagara Falls, this city, and the Peoples Gas, Light and Coke Company in Chicago.

Surviving are his wife, Sarah Louise Billings; one son, William H. Billings, jr., and two grandchildren.

Harry Bryant Davis

Harry Bryant Davis, chairman of the board and a founder of the H. B. Davis Paint Company, Baltimore, died May 10, after a long illness. A native of Baltimore, Mr. Davis attended the Johns Hopkins University. Previous to the founding of the H. B. Davis Paint Company in 1898, Mr. Davis, with his late brother-in-law, L. H. Fehsenfeld, had been associated with the Baltimore Copper Smelting & Rolling Company.

William H. Morris

William H. Morris, secretary of the Archer Daniels Midland Company since 1929, died in Minneapolis May 11. He spent virtually all of his life in the linseed business. He was with the Midland Linseed Products Company before it merged with the Archer Daniels Company in 1923. He was born in Fillmore county, Minnesota.

Simon S. Selig

Simon S. Selig, president of the Selig Company, Atlanta, Ga., died May 10 in Hot Springs, Ark. He lived at 897 Springdale road, N.E. He was sixty-four years of age. Mr. Selig established the sanitary supplies company bearing his name in 1896. He was a former president of the National Sanitary Supply Association, and former member of the board of directors of the National Association Insecticide and Disinfectant Manufacturers. He was also president of the Selig Company of Texas, in Dallas.

Mrs. Fannie H. Stewart, wife of Thomas J. Stewart, president of the Milligan & Higgins Corporation, glue manufacturers, this city, died May 13 after a long illness in their home in Jersey City, N. J. She was sixty-eight years old.

turns a fabulous empire into a mirage

Buna-S

The greatest bomb that has yet fallen on Tokio is a harmless-looking nozzled spinerette that makes synthetic silks.

It shook the silk dynasty on which Japan's whole industry was reared. But war and business go hand in hand in Japan. The crafty Jap saw himself capturing another priceless empire . . . rubber. That would strangle the American war machine. It would let Japan levy tribute on the world through all the peace. But another bomb has fallen on Tokio . . . Buna-S. Two liquids called butadiene and styrene are manufactured by complicated processes and, from them, Buna-S is made. In many ways it is a better rubber than rubber itself. The Jap dream of a priceless rubber empire is but a mirage. Koppers is building, for warring America, the nation's largest butadiene and styrene plant. Koppers coke ovens and benzol plants provide much of the material from which the styrene comes. Other Koppers coal derivatives are used in the processing of natural and synthetic rubber—Koppers Company and Affiliates, Pittsburgh, Pa.

KOPPERS

THE INDUSTRY THAT SERVES ALL INDUSTRY

Paint Technicians Discuss Problems

—Continued from page 7

give the same durability and so would higher pigmentation, although some question exists with reference to the coating of porous surfaces.

No extra caution is needed in the new formulation—and no less—Mr. Brooker pointed out; only it is necessary to use less reactive components. Appearance and protection are good with the new formulas, but exposure data are not yet sufficient in time for definite conclusions. Bodying the oil in vacuum gives higher viscosity and less acidity. Air-bodying below 600° is good; acidity must be kept below 10.7 to avoid cracking and checking; bodying at 535° in air with an acidity of 7.5 gives higher viscosity but less durability. It was his belief that the whole binder should be bodied oil.

Mr. Brooker pointed out that normal pigmentation is necessary, and outlined the use of titanium dioxide and zinc oxide.

Pigment Ratio

With further reference to exterior formulations, E. P. Peterson, of the National Lead Company research division, said that diversion of linseed oil called for careful consideration, but he was doubtful that a thinner paint film which would consume less oil would be satisfactory. Mr. Peterson dismissed the characteristics of low and high ratios of pigment and vehicle, pointing out that high oil and high pigmentation would lead to problems of application common to enamel-type coatings. He considered normal P-V best. Some oil can be replaced with volatile thinner if the paint is adjusted with bodied oil for leveling, brushing, and gloss. To have the same viscosity is not enough: all properties must be considered, especially the greater physical and chemical reactivity with bodied oil.

Mr. Peterson favored vacuum or low-temperature bodying, and said that the OPA suggestion called for too much Z4 oil, a smaller lot of the higher viscosity oil being preferable. He suggested selection of the least reactive bodied oil of highest viscosity with full regard for brushing properties; avoidance of pigment reaction; and adjustment of pigmentation to control checking and chalking and other effects.

In the opinion of H. A. Nelson, assistant to the general manager of the New Jersey Zinc Company technical department, use of all light-bodied oil instead of a mixture of raw oil and heavy-bodied oil would lessen checking and erosion. Pigmentation is a factor in the latter. Mr. Nelson and Mr. Peterson were in agreement that it was desirable to avoid silicious extenders in the new formulation. The latter said that any standard pigmentation was all right.

Use of a bodying agent was advocated by Mr. Nelson, who pointed out that heavy bodies give higher consistency; low-bodied oils were less reactive. He could see no reason for restricting formulation to any viscosity range. Tabulated results of weathering tests of bodied-linseed oil paints were presented by the speaker, "P" oil giving the best showing; "E" oil showed better than unbodied oil in other tests reported. He also presented tabulations of physical changes resulting from varying different factors in the composition of a paint.

Preparing Bodied Oils

A series of lantern slides was exhibited and explained by Dr. Joseph J. Mattiello, of the Hilo Varnish Corporation, covering the technic of bodying paint oils. It was explained that high viscosity gave a tendency toward livering. The advice was to start bodying at a high temperature and decrease the heat as the viscosity goes up.

There is no livering with titanium dioxide, Dr. Mattiello said and none when the acid value of the oil is below 7. He explained the reactions with bodied oils of peacock blue, zinc oxide, titanium dioxide, carbon black, and other pigments, showing the temperature and viscosity ranges wherein differences in properties took place.

In a general discussion of oil-conserving formulation it was brought out that some consider conditions of decomposition a more potent factor than temperature in effects on bodying. Kenneth J. Howe, of Thibaut & Walker, questioned the practicability of bodying large batches of oil at as high as 625° F.

The question of labeling paints made by the new formula came up. The consensus was that no special labeling was in order, but it was urged that "negative" advertising be avoided and the general characteristics of the new paints emphasized to the public, along with the demands of war for oil.

With respect to adding linseed oil to the new paints it was opined that an order for at least restriction of the use of oil by painters on the job was probable. It was suggested that order 125 be changed to get away from the use of high-bodied oil.

Petroleum Drying Oil

Some experimentation with a petroleum drying oil was reviewed by E. M. McMullen, director of research for the Eagle-Picher Lead Company. This oil is dark in color, hence not suited for white or light-tinted paints. It gives good leveling and good gloss, Mr. McMullen said; and its brushability is equal to that of linseed oil. problem. Cutting nonvolatile to 30

Walter F. Kuster
President, F.P.V.P.C.

It dries more slowly, but works well with the addition of a lead-cobalt drier, and provides good hardness and toughness. Accelerated testing of petroleum-oil paints gave satisfactory results, Mr. McMullen said. The oil costs about one-half as much as linseed oil.

On other aspects of the new formulation, Mr. McMullen said that P-V ratio should be determined technically, not economically. Optinum P-V is basic and a narrow range is desirable. Heavy-bodied oil, he said, prevents penetration and gives less hiding power in relation to film thickness. Brushability of its paints is till a question, he held.

Linseed Oil Substitutes

Experimentation of committee No. 9 of the New York Paint and Varnish Production Club with substitutes for linseed oil was reported by Austin O. Allen, technical director for the Vita-Var Corporation. The committee found a light-colored petroleum drying oil gave definite cracking; two darker-colored similar oils showed bad erosion; tall oil pitch was fairly promising; refined tall oil, replacing from 25 percent to 50 percent of the linseed oil, showed considerable promise especially when treated with lime.

The committee experimented also with petroleum resins, petroleum pitch, pale and dark asphalts, crude tall oil, rosins, cottonseed oil pitch, castor oil residue, congo resins, processed fish oils, fish-oil pitch, stearin pitch, coaltar pitches, and coumarene and indene resins.

These were run in customary house paint formulas, exterior structural coatings, and some 1,215 formulas. White paint could not be got with any. Tall oil gave higher viscosity with active pigments, and low gloss. Cottonseed oil pitch acted similarly and also bleached. Fish-oil pitch was the most satisfactory—in dark paints.

Interior Formulations

The WPB task committee is convinced that satisfactory interior paints can be made with the allowable proportions of drying oil, said Alvin C. Goetz, and a saving of 43,000,000 pounds of oil annually is expected. Manufacturers should not request new formulation until advised by OPA because sale is not now permitted under MPR 198. Rosin liquid is promising as a component of interior paints.

A coming WPB order will set oil maximums for various paints (see above) but not for colors in oil or pigment pastes. Oil will be reduced to not more than 70 percent of solids. No linseed oil will be permitted to be sold over the counter and bigger oil requirements will be exempted by special order. Industrial and specification paints will be treated the same as others, but it is likely that goods for the armed forces will be exempted.

Production Problems

Practical production under the oil restrictions was discussed by J. A. Lutz, of the Titanium Pigment Corporation, who compared the methods of reducing oil length, reducing total film solids, and adjusting pigment-oil ratios. Flat paints offer the biggest percent or 35 percent is satisfactory if loss of penetration is avoided by higher viscosity. As a bodying agent, 10 percent NaOH solution was suggested, used to the extent of about 0.4 percent. Pigment increase avoids or minimizes use of bodier.

Linseed oil treated with dolomitic lime improves paint variously, and low oil-content wall paints (1.29 pounds per gallon) are practicable with a specially processed highly

Dr. Joseph J. Mattiello

polymerized oil bodied with NaOH. Use of 2 pints or 3 pints per gallon, reduced with mineral thinners was advised. Oil content of 1.75 pounds is quite satisfactory, although 2 pounds is the best proportion for porch enamels. Use of a satisfactory primer, such as TT-P25, is helpful.

War Program

When the symposium shifted from drying oils to paint work for the armed forces, Maj. A. I. Totten, jr., of the A.S.F. resources and products division, read the following appreciation expressed by Brig.-Gen. H. C. Minton, director of the division, in a letter to Walter F. Kuster, president of the federation:—

On the occasion of the midyear technical symposium of the Federation of Paint and Varnish Production Clubs, I take this opportunity to express the appreciation of the War Department for the excellent work your organization is doing in the development of satisfactory paint products for military equipment. It is my understanding that many difficult projects, involving either the formulation of finishes for new uses or the revision of formulas to conserve critical materials, have been completed satisfactorily due to the unselfish manner in which the members have given their time and efforts during their free hours.

This type of spirit, coupled with the proven skill and ingenuity of the industry which you represent, will continue to help solve our paint problems and thus play an important part in the winning of the war.

President Kuster said that service was the paint industry's primary aim, and that he was greatly pleased that its biggest consumer thus recognized its endeavor to live up to that purpose.

The war program was handled by Dr. Joseph J. Mattiello, vice-president and technical director of the Hilo Varnish Corporation. Representatives of the armed forces and of the industry contributed to it.

The current situation with respect to cooperation between the army and the navy in the providing of specifications was reviewed by Maj. A. I. Totten, of the A.S.F. resources and products division. The immensity of the task of providing war paints stems largely from the necessity of high resistance in such coatings, Major Totten said; extremes of temperature and humidity must be met and all sorts of rough handling must be guarded against. Coatings must be dull, and they must be durable. Some must be quickly removable, and under most must be a rust-inhibiting primer.

Testing of spot check samples has not yet been adequately developed, Major Totten declared; but the goal is the elimination of failure to meet standards, even if suppliers must be debarred. Refinishing is too costly to permit substandard original work. Best use of available materials is sought; specifications must be modified to meet conditions of supply, as well as of use. Military end uses are being listed, and it is purposed to allocate materials to all manufacturers who have the same end use. Alternate specifications, avoiding critical materials, are greatly desired and speedy compliance therewith is sought to develop practical comments. Revision of 3-175 was noted.

Sludge Salvage

There is not enough collecting and processing of paint overspray, or sludge, Major Totten said, and he urged that such salvage be promoted.

A consolidated color card is shortly to be issued covering all military and other Federal specifications with seventy-two colors where formerly there were 220, the simplications (some of these were exhibited) run as far as reductions of from six to one.

Testing, sampling, and marking are to be standardized and simplified. TT-P-141 is being revised. Obsolete specifications are being cancelled. All finishing specifications are being simplified (lists of specifications were distributed). Practical, constructive criticism is welcomed.

Maj. A. I. Totten, Jr.

In AXS-946, primer for lacquer for ammunition, aliphatics are replacing aromatics; nitrocellulose will be more largely used. A new AXS-962, lusterless gasoline-removable paint, has been issued. There is a new AXS-924 on resin emulsions. Major Totten emphasized the essentiality of protective paints in respect of the life and death of the men under arms; he declared that the duty of all is to see that the best possible products are provided out of the raw materials which are available.

Navy Specifications

The method of painting warships was outlined by Lt. H. L. Aldrich, of the Navy Department Bureau of Ships. Interior steel is given a coat of zinc chromate primer and a coat of white fire-retardant paint according to a chart of combined film thickness. Exterior steel gets two coats of zinc chromate primer and two coats of camouflage paint above the water line, or one coat of plastic anticorrosion paint and one of antifouling below the water line.

—Continued on page 46

Paint, Varnish, Lacquer Materials

War Orders Still Constitute Bulk of Business in Materials—Belated Spring Painting Benefiting Dealers Without Amplifying First Hand Suppliers' Sales—New Color Ceilings Satisfactory

Despite a notable spurt during the past week in outdoor painting operations on residential and private business properties in both urban and suburban areas of the more northerly regions of the country, wherein these activities in maintenance painting had hitherto been postponed by unseasonably prolonged inclement weather, there has been little improvement in the volume of business on these civilian accounts booked by paint mixers and manufacturers of varnishes and lacquers or by the producers, importers and other suppliers of the raw materials.

Wholesale and retail dealers have benefited considerably by this belated acceleration of the pace of Spring painting, as professional painting contractors have called upon them extensively for increasingly needed supplies of ready-for-application paints and ready-for-mixing pigments, colors, solvents, driers, varnish gums, rosin, turpentine and mineral spirits. But, with the stocks of all these materials in dealers' hands already built up to sizable proportions, in anticipation of this late Spring demand, the drain upon their supplies has not yet been great enough to result in such depletions as to require replenishments to any noticeable extent on these scores.

Still wrestling with the problem of stretching the greatly restricted amount of linseed oil at their disposal—the use of which for non-military purposes has already been limited to 50 percent of its 1941-1942 base period usage and expected to be further contracted—leading interests in the paint industry have developed extraordinary aptitude and expertness in devising economical formulations for both inside and outside paint products, meeting OPA's specifications and, in some instances, affording larger profits, provided that enough business is forthcoming. Notable progress is also reported in the successful use of Congo copal gum in emulsion paints.

Price Changes

Advanced

Rosin, gum, dark, medium, 2c. to 8c. per 100 lbs.
Turpentine, gum, 1c. per gal.

Reduced

Rosin, gum, pale, 5c. to 13c. per 100 lbs.

Comparative Values

Index numbers compiled from ten typical paint and varnish materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
140.2	**140.2**	**140.2**	**141.4**

Market news that may have developed after this report was sent to press will be found on page 4.

Metallic Lead and Zinc

Current domestic production of lead ore and pig lead is currently running at a rate sufficiently large to assure ample reserves for both the War Production Board and non-essential use, despite a slight falling-off in importations. Hence oxidizers and other lead pigment makers continue able to fill their requirements. Prices of pig lead have remained unchanged for the week, May 7 to 14, at 6.35 cents per pound in St. Louis and 6.50 cents in New York.

Zinc slabs are still in rather limited supply, albeit the current output and stocks of zinc ore continue to reach sizable proportions. Prices for the slabs have shown no changes within the week, May 7 to 14, remaining at 8.25 cents per pound in East St. Louis and 8.66 cents in New York. Latest arrivals of zinc concentrates have included 12,442,240 pounds at Baltimore.

Pigments

Blue Lead.—Uncertainty as to the quantity of linseed oil that will be available for paint makers in the remainder of the second quarter and in the third quarter of this year is exerting a highly restrictive influence upon buying operations in this as well as in all other descriptions of lead pigments.

Lead Titanate.—Only a moderate volume of business is now being transacted in this material.

Litharge.—A seasonally waning demand is noted. War orders continue fair-sized but non-essential-to-war operations are fast shrinking.

Lithopone.—Movement into civilian production channels slowing down. Some business is still being booked, however, on military account.

Orange Mineral.—Shipments running rather small, as usual at this time of year.

Red Lead.—With production of paints requiring linseed oil increasingly curtailed by inadequacy of the current supply of this medium, the buying movement in this pigment is diminishing commensurately.

Titanium Dioxide.—A goodly call for this material continues to be noted and the booking of orders is currently on a larger scale than in recent weeks, although still slightly below the record for April. A slow-down is expected, however, with a threatened further restriction on the use of drying oils.

White Lead.—Buying for civilian product account continues to wane but war orders are still keeping this pigment fairly active.

Zinc Oxides.—A fair volume of business continues to be recorded in French process oxides, despite the rather short available supply of zinc slabs. American process oxides are still moving well. And further acceleration of the pace is looked for as the synthetic rubber production program gets further under way.

Fillers and Extenders

Asbestos.—A slight acceleration of the pace of the movement of both Canadian and domestic grades has been noted with a Spring spurt in the employment of asbestos shingles for residential sidings. Prices firmly maintained on all grades.

Barytes. — In moderate request. Prices steady.

Charcoal.—Hard pressed by the necessity for filling priority orders for charcoal at the GMPR figures of March, 1942, far below present-day costs, producers and other suppliers of this material have appealed to OPA for relief in the form of that bureau's authorization of a higher price ceiling and generally believe that OPA will grant their requests.

China Clay.—In light inquiry but plentiful supply.

Diatomaceous Earth.—Only a routine movement is noted in this material.

Graphite.—Buying movement keeping up well at recently revised prices.

Gypsum.—Still moving slowly but unceasingly into consuming channels.

Mica.—Both wet and dry ground scrap processors keeping pace with the current requirements of the paint industry. Prices well maintained at the recent upward revision levels authorized by OPA.

Talc.—Fair-sized shipments continue to be made. Prices well maintained.

Dry Colors

Although the market for dry and chemical colors continues "spotty," with some lines showing considerable activity while others remain quiet, the

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 9

STEARATES

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PROPERTY OF DIBUTYL PHTHALATE	U. S. ARMY SPECIFICATION NO. 50-11-61A	U. S. I. SPECIFICATIONS
Color	No darker than a solution of 0.5 cc of *N*/10 iodine in 100 cc of distilled water	Water white
Specific Gravity at 20°/20°C	1.044 to 1.054	1.047 to 1.051
Ester Content	Minimum 99%	99-100%
Acidity, Maximum	0.03%	0.01%
Ash, Maximum	0.02%	0.01%
Odor	Not specified	Odorless
Freedom from Water Miscible without turbidity or separation with specified quantity of 60° Bé gasoline at 20° C	Not specified	Miscible with 20 volumes

Like Dibutyl Phthalate, other U.S.I. products for the paint, lacquer, and varnish industries meet and often exceed the standards set in many official specifications. This high quality assures you the properties you need in the solvents and plasticizers used in your formulations.

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To cite a single example, of which there are many, Mapico pigments will have an important place in the formulating of mildew-resistant, fire-resistant coatings for woven fabrics, such as tenting cloth, tarpaulins, awnings and the like.

The larger demand for Mapico pigments will be met fully because production facilities have been increased for that purpose.

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4½ million gal. U.S. Gov't Bonded Tank Storage

aggregate volume of business now being transacted is reaching sizable proportions.

Careful perusal and analysis of the revision of OPA's Maximum Price Regulation 180, released May 8 and effective May 14, whose issuance was predicted by the REPORTER last Fall, have revealed the fact that, after frequent consultations with the members of the Dry Color Association, it has authorized retention of the April 1, 1942, ceilings for chrome yellows and greens, including molybdate orange and zinc yellow, and has also transferred all other color pigments, hitherto remaining under control of the General Maximum Price Regulation to Regulation 180, so that all their price ceilings again reflect their October, 1941, levels. The new maximum prices, which are set forth in full for Zone (a), with differentials stated for Zones (b), (c), (d), (e) and (f), show little change from the market prices existing last July when the original MPR 180 was issued. For zinc chromate yellow, full strength phthalocyanin blue, green shade phthalocyanin blue and phthalocyanin green toner, the ceilings established by OPA are considerably above those prevailing in the current market, and in no instance are these ceilings lower than the current market price.

Alkali Blue.—Continues in fair request.

Bone Blacks.—Buying interest showing some improvement.

Carbon Blacks.—A steadily mounting demand is noted for all descriptions of this material. But for April there is shown to have been a drop in shipments of sufficient size to cause a further increase in surplus stocks, although the output was somewhat curtailed. According to preliminary trade figures, released last week, shipments of carbon black for the previous month aggregated 30,447,000 pounds, compared with 32,326,000 pounds in March while production of gas black reached 31,111,000 pounds, contrasted with 33,349,000 pounds for the preceding month and stocks in the hands of producers at the end of April have revealed an increase from 250,703,000 pounds to 251,367,000 pounds. A majority of domestic producers of black are preparing to expand their furnace black capacities in the two ensuing months.

Chrome Colors.—War orders are still keeping the market for chrome colors active, despite a seasonal falling-off in civilian account business. Zinc yellow, although favored with a ceiling of 17½ cents per pound is currently being offered at around 15 cents per pound.

Driers

A steadily mounting volume of business is being transacted in stearates and palmitates. There is also an active request for linoresinates and other linseed oil-based substitutes for naphthanates, which so far have suffered no unpleasant reflexes from the drastic restrictions imposed by federal agencies on the use of that oil.

Lacquer Materials

Butyl Alcohol.—Ceiling prices for fermentation butyl alcohol have been revised by OPA in an amendment to MPR 37. Existing base ceilings of 14.25c. per pound delivered in Eastern territory are continued in effect for material produced in Indiana and Illinois but the action raises the basic ceiling for producers in other States from 14.25c. to 16.6c. per pound until June 30, 1943, and to 19c. per pound after that date.

Ethyl Cellulose.—Use of ethyl cellulose except on specific authorization by WPB has been restricted through issuance of general preference order M-175, as amended.

Nitrocelluiose.—Market position unaltered. Quotations same. A sharp decline of 2,800,000 pounds in the output of acetate rayon, chief reliance of civilian supply due to the war's inroads on viscose and cuprammonium types, was registered during the first quarter of this year as compared with the fourth quarter of 1942, according to the Textile Economics Bureau.

Naval Stores

Rosin was somewhat more active last week. The improvement in business was not important, but it was sufficient to cause a moderate advance in some grades and also to create a better feeling regarding the business outlook. While trading in turpentine remained disappointing there was an impression in some quarters that the more favorable weather prevailing in parts of the country recently will find reflection sooner or later in an expansion in the movement into consuming channels in painting operations. Daily offerings at Savannah were still unusually light, but higher temperatures in parts of the South were regarded as foreshadowing an increase in the not distant future in production operations in the woods and a larger movement of both rosin and turpentine to marketing centers. Considerable turpentine is expected to move under government control through stockpile operations in view of the existing differential between the stockpile quotation and open market prices.

Turpentine.—Quiet conditions continued to prevail in the local market, inquiries being limited to small quantities with the aggregate movement of such lots apparently no larger than in the previous week.

Savannah, May 14.—Following is a record of the turpentine market for the week:—

	Gallons—Cents.	Sales.	Barrels—Receipts.	Shipments.	On hand.
Saturday*	..	...	...	...	...
Monday	63¼	600	24	170	25,746
Tuesday	63	2,150	177	...	25,941
Wednesday	63	750	175	229	25,857
Thursday	63½	1,400	174	...	26,061
Friday	63¼	100	92	200	25,953

* No trading.

Chicago, May 14.—Turpentine brisker. Five-drum lots, 76c. per gallon; five wood barrels, 81c.; single drums, 79c.; single barrels, 84c.

Rosin.—No material change in the character of business was noted here, but an increase was reported in the request for small or moderate quantities of some grades for prompt shipment.

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★ ★ ★

Savannah, May 14.—Following is a record of the rosin market for the week:—

	Price per unit—Low of range quoted—				
	*Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	$2.71	$2.72	$2.75	$2.74	$2.77
D	2.92	2.93	2.95	2.96	2.99
E	3.37	3.39	3.41	3.42	3.43
F	3.44	3.44	3.45	3.45	3.46
G	3.53	3.53	3.54	3.54	3.55
H	3.54	3.53	3.54	3.54	3.55
I	3.55	3.55	3.54	3.54	3.56
K	3.71	3.73	3.73	3.74	3.76
M	3.76	3.78	3.78	3.78	3.79
N	3.76	3.78	3.78	3.78	3.79
WG	4.20	4.16	4.16	4.16	4.16
WW	4.30	4.30	4.30	4.30	4.30
X	4.30	4.30	4.30	4.30	4.30
	Barrels				
Sales	455	450	263	143	234
Receipts	148	497	273	400	350
Shipments		108			20
Stocks					81,632

* No trading.

Chicago, May 14.—Business picking up in rosin. Five-drum lots:—B grade, $4.47 per 100 pounds net; G grade, $5.38; M grade, $5.51; W.W. grade, $6.05.

Other Naval Stores

Pitch.—Output being steadily absorbed by deliveries on old and new contracts.

Rosin Oil.—Purchasing generally along conservative lines. Quotations steady.

Tar.—Movement into consuming channels steady and apparently liberal.

Shellac

No further arrivals of shellac were reported last week. Need runs high and it is proving difficult to keep supplies arriving here with any degree of regularly. However, now that the Mediterranean sea control has been taken from the Axis and is held by the United Nations, it is possible that the distance from Calcutta to New York will be shortened before long by making use of the Suez canal and that may mean a distinct improvement in the landing of shellac in this country.

Varnish Gums

Asphaltum.—In steadily increasing demand. Most important development of past week has been issuance by OPA of Amendment 3 to MPR 323, establishing a uniform markup of $2.50 per ton in the charge that producers may make for conveying their goods from their plants into warehouses, incorporating same in their price on a delivered at such warehouse basis, and fixing $2.50 as the amount which dealers, resellers or refiners may add to their cost.

Copals.—With the constant development of new uses for Congo gum, as a substitute for the scarce synthetic resins and shellacs in the making of protective coatings, the demand for this gum is becoming brisker daily. At a recent meeting of the American Gum Importers Laboratories, an interesting survey of some of the new uses to which Congo copals have been put was made by an adept researcher who dwelt at length on its eminently successful employment in the production of emulsion paints.

Synthetic Resins

Although the supply of phenol-formaldehyde and phthalic alkyd resins available for civilian users is far less than the current demand which is running at a rate well calculated to absorb twice as much as it can get, somewhat more liberality is being shown by WPB in its most recent allocations of these products for employment in protective coatings.

Glues and Binders

Casein.—In response to appeals made to it by the Casein Importers Association, to assist in relieving the appalling shortage of casein so pressingly needed by paper coaters and cold water paint makers as well as the plastics processors, many of whom are engaged in military production, the Chemicals Division of the War Production Board has authorized the importation of approximately 800 tons of this material from the overflowing stocks in Argentina. But the WPB division has let it be known that this action does not signify any intention on its part of opening the import gates to a flood of Argentinian goods. On the contrary, it has clearly stated its position in this matter to be merely that of endeavoring to afford some slight relief from the casein shortage in the United States at this time.

With leading consumers clamoring for fully ten times the amount thus permitted to be imported, the relief likely to flow from this source is indeed meager. Even when it arrives here, this Argentine casein will be subject to WPB's allocation control, which became effective May 15, to the same extent as domestic production.

Glues.—Demand for both bone and hide glues is far outstripping even the output which is running rather low because of a scarcity of raw materials. In numerous instances, manufacturers are allotting their current production to contract customers on as equitable a basis as possible.

—O-P-D—

Trade Briefs

O. S. Tyson & Co., this city, has issued a 13-page booklet entitled "New Graphite Know-How Package."

National Lead Company, this city, has closed down its Linseed Oil mill April 26 due to the inability to secure flaxseed.

New England Paint, Varnish and Lacquer Association will hold an outing at the Winchester Country Club, Winchester, Mass., June 10.

Firestone Tire & Rubber Company, Akron, O., has entered into a contract with the Defense Plant Corporation, to provide plant facilities in Georgia, at a cost of approximately $600,000.

'Witcombings,' published by Wishnick-Tumpeer, Inc., this city, features an article on 'Witcogum,' new chemurgic rubber, which has been developed from vegetable oils by the company.

"Smelting of Vanadium-Bearing Titaniferous Sinter in an Experimental Blast Furnace" is the title of a report issued by the Bureau of Mines. Copies may be obtained from its office in Washington.

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PROSEIN* (PRIORITY NOT REQUIRED)
—now available for extending or replacing Casein!
—mechanically refined soybean protein adhesive product. For water paints and special coatings — backing and sealing paints for floor coverings—paper coatings—washable wallpaper coatings—sizes—emulsifying and stabilizing of oil-in-water emulsions. Contracts offered.

Other Available SOYA PROTEIN *Products*

MULSOYA* (PRIORITY NOT REQUIRED) —water soluble isolated soybean protein derivatives for textile and other sizes.

PROSOY G* (PRIORITY NOT REQUIRED) —special soybean protein product of low water solubles and high fibre content. Filler and extender for molding resins.

ALPHA PROTEIN* —our total production of Alpha Protein, the chemically isolated soybean protein, is temporarily required for direct war users and contract commitments. Enlarged production is under way.

*Trade Mark Registered U. S. Pat. Off.

THE GLIDDEN COMPANY—SOYA PRODUCTS DIVISION
5165 W. MOFFAT STREET, CHICAGO, ILLINOIS

Oils, Fats, and Waxes

April Refined Cottonseed Oil Consumption Down to 270,000 Barrels —Southern Crop News Better—Domestic Flaxseed Prices Rise — Linseed Oil Quiet — General Market Firm

There was little to record in the way of activity in the market for miscellaneous vegetable, animal and fish oils, fats and greases last week so far as new business was concerned. Buying interest was not lacking, but the various official restrictions, the curtailed production of many oils and fats and the scarcity of open market supplies kept fresh transactions down to small proportions. Contract deliveries were steady, however, and the market in general remained firm.

A development of interest was the publication late in the week of the monthly cottonseed report from the Census Bureau. This showed a further shrinkage in the use of refined oil, consumption during April being about 30,000 barrels less than in March, when the disappearance was 60,000 barrels smaller than in the previous month. The market here for refined cottonseed oil futures remained stagnant during the week at stationary bid and asked prices. Crude cottonseed oil continued firm in primary centers, offerings being inadequate for demand, and the same was true of peanut and soybean oils.

Southern advices concerning the progress of the new cotton and peanut crops were more favorable, needed rains having been received in various sections. The trend of domestic flaxseed prices was upward, but linseed oil remained quiet here. Some crushers were firmer in their views, especially as regards future positions.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
194.3	194.3	194.4	194.6

Market news that may have developed after this report was sent to press will be found on page 4.

Vegetable Oils

Castor, Dehydrated.—In good request. Contract deliveries steady. Little free oil available. Market firm.

Corn.—Prompt and nearby crude oil still scarce. Inquiry good. Firm at ceiling. Government purchased 2,660,000 pounds first quarter this year. Commodity Credit Corporation loans outstanding on 115,807,746 bushels of corn at close of March $84,295,000.

Olive.—Offerings of domestic and imported oil remained light. Opinion expressed in some quarters ending of military campaign in Africa may be followed by shipments of olive oil to this country; others contend stocks there unimportant.

Palm.—Recent imports 1,241 tons noted. Little free oil available on spot. Market firm.

Peanut.—Scarcity of offerings continued to be noted in all centers. Arrivals of peanuts at mills still disappointingly small. Peanut crop news more favorable, but rains badly needed in parts of Texas. Crop reported up to good stands in Southeastern states.

Soybean.—Little activity here in absence of increased offerings though inquiries not lacking. Movement of beans to crushers still below expectations. Commodity Credit Corporation loans on 3,482,015 bushels of soybeans outstanding at close of March $5,520,000.

Chicago, May 14.—Limited amounts of vegetable oils moving, corn oil, refined, edible 15½c. to 15¾c. per pound, drums, car lots; soybean oil, crude, f.o.b., mills, 11¾c.

Los Angeles, May 12.—Vegetable oils pegged at ceilings with supplies short. Copra is arriving at more or less regular intervals and in fair quantity from the south seas. Castor, Prime Cold Pressed.—Quoted at 13.5c. per pound in tankcars, f.o.b. Los Angeles. Copra.—Crushers on Coast bidding $105 per short ton. Sales handled by government. Soybean.—Quoted 12.50c. to 12.65c. per pound, tankcars.

Flaxseed

Domestic flaxseed prices had an upward trend much of the time last week.

Minneapolis, May 14.—With crushers running short of flax for immediate crushing, competition between them for the limited offerings becomes stronger. Terminal receipts during the past week and longer were virtually all from interior elevator stocks because farmers have had no time to do hauling of importance. There may be a post-seeding movement of consequence but arrive purchases of the past week do not indicate such a boon to crushers. Most of the old sales have been filled and arrivals are mostly offered on track.

Seeding operations irregular on account of the weather. Considerable rain and cold reported through important areas and it is impossible for the farmers to make steady progress. There is considerable acreage still without seed.

The week's closing flaxseed price range was as follows:—

	Cash	May	July
Saturday	$3.18	$3.06	$3.05¼
Monday	3.19½	3.07	3.06½
Tuesday	3.21⅝	3.09	3.07⅝
Wednesday	3.22⅝	3.10	3.07⅝
Thursday	3.22	3.11	3.07
Friday	3.21½	3.09½	3.06½

Crop movement in bushels follows:—

	Receipts		Shipments	
	1943	1942	1943	1942
This week	178,500	155,400	99,000	27,400
Since Sept. 1	17,555,900	9,201,200	2,136,300	765,600

Buenos Aires, May 14.—Flaxseed not quoted. Exports this week 98,000 bushels to the United Kingdom. Visible supply 41,532,000 bushels.

Linseed Meal.—There was no increase in offerings here and the market was quiet and nominal.

Minneapolis, May 14.—Linseed meal demand active but crushers have nothing of importance to sell. Pasturage is developing slowly and is of little help as yet. Mills are at least a month behind.

Shipments of mael in pounds were as follows:—

	1943	1942
This week	10,320,000	6,410,000
Since Sept. 1	351,780,000	285,382,000

Linseed Oil

Flaxseed markets dsiplayed not a little strength at times during the past week, but business in linseed oil remained quiet here, the attitude of buyers still being a waiting one. Shipments on old contracts were steady and somewhat larger than in the previous week. Crushers in some cases were firmer in their views and not inclined to offer for delivery beyond July or August. Mills here and in other parts of the country were generally operating at capacity, but one local crusher discontinued operations temporarily owing to a lack of seed. Government requirements continue large. Additional purchases of edible linseed oil were noted at 14.4c. per pound, the quantity involved being 1,240,000 pounds. During the period from March 15, 1941, to March 31, 1943, purchasers of edible linseed oil by the government aggregated 130,-

Association Meetings:—

National Cottonseed Products Association, Hotel Roosevelt, New Orleans, La., May 17 and 18.

Bureau of Raw Materials for Vegetable Oils and Fats Industries, Waldorf-Astoria, New York, June 9.

Current prices on animal, vegetable, and fish oils (under Oil), fats and greases (under Grease) are given in the alphabetical list of prices beginning on page 9

TALL OIL
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245,710 pounds. Recently the government was in the market for shortening made with 100 percent linseed oil base.

Minneapolis, May 14.—Civilian linseed oil trade more active. Most buyers would like contracts open for summer and early fall shipment but avid demand for lend-lease purposes keeps crushers in a bad position insofar as forward selling is concerned. Current buying of oil and inquiry suggests a shortage of as much as 4,000,000 bushels of flax before the season is out.

Quotations on tankcar lots 15c. per pound, cooperage car lots 15.9c. per pound, ware lots 16.3c. per pound, f.o.b. Minneapolis.

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Shipments of meal in pounds were as follows:—

	1943	1942
This week	9,040,000	10,150,000
Since Sept. 1	200,860,000	158,544,000

Los Angeles, May 12.—Linseed oil quiet. Harvesting of flax in Imperial progressing, although deliveries will not be general until end of month. Crop conditions in San Joaquin Valley remain favorable. Oil quoted:—Tankcars, 15.2c. per pound; drum car lots, ex mill, 15.6c.; drum lots ex warehouse, 16.2c.

Cottonseed Oil

Stagnation continued in the local market for refined cottonseed oil futures. Prices were stationary. On Thursday the monthly cottonseed report was announced by the Census Bureau. This showed that consumption of refined oil during April was 270,730 barrels against 299,608 barrels in the previous month and 217,545 barrels in April last year. During nine months of the season ended with April 2,890,713 barrels were consumed against 2,215,528 barrels in the same time last season. Hog marketing increased and hog prices declined rather sharply. The weight of the hogs received in Chicago during the week ended April 8 averaged 259 pounds compared with 250 pounds in the same week last year. Stocks of lard in Chicago decreased 1,437,675 pounds during April leaving a total of 13,987,181 pounds against 49,844,563 pounds a year ago. The government announced recent purchases of refined lard amounting to approximately 29,000,000 pounds. Cotton crop news was more favorable.

No sales. Prices follow:—

	Cents per pound in tanks— High.	Low.	Close.
May	....	....	13.95@14.45
July	....	....	13.95 bid

Cash oil, 13.95c. bid.
Crude, Southeast, 12¾c.

Chicago, May 14.—Cottonseed oil is moving steadily. Refined, edible oil, 16¼c. to 16½c. per pound, drums, car lots.

Cake and Meal.—Production diminishing and offerings light in all Southern markets. Inquiries numerous. It was announced that the CCC will offer for sale first-cut linters not needed by the government for chemical use.

Atlanta, May 12. — Meal production slowed down materially by lack of seed. Cottonseed meal, 41 percent, $38.60 per ton. Rains improved cotton.

Memphis, May 13.—Cottonseed, soybean and peanut oil and meal firm at ceiling prices. Offerings scarce. Numerous inquiries. Cotton crop two weeks late in this section but getting under way nicely now.

Fatty Acids

Buying interest in fatty acids continued good, inquiries covering many descriptions. Producers in some cases appeared to be sold well ahead. Supplies of not a few raw materials were still said to be inadequate for the needs of producers. Consumption of stearic acid is reported to be unusually heavy and some sellers have advanced the price to 15⅞c. per pound for double pressed in car lots.

Chicago, May 14.—Fatty acids in good demand. Corn oil, double distilled, 14c. to 14½c. per pound, tankcar; cottonseed oil, double distilled, 14c. to 14½c. tankcar; cottonseed foots, 50 percent, 3¼c. to 3½c.

Fish Oils

Menhaden.—Inquiry for refined oil slow, buyers being inclined to hold off for new developments in the fishing situation. Local stocks light.

Sardine.—Aside from the continuation of a firm tone, the local refined oil situation lacked features of interest. Inquiries were few and limited to small quantities.

Los Angeles, May 12.—No trading in fish oil. Ceiling on crude California sardine is 66.75c. per pound.

Fats and Greases

Grease.—Inquiries numerous for spot and future positions, but few sellers apparently in a position to accept orders as production remains below normal.

Tallow.—Offerings continued light and there was apparently little to record in the way of activity, although buying interest remained keen. Market firm at ceiling. The recent purchase of approximately 1,000,000 pounds of edible tallow was reported by the government.

Chicago, May 14.—Fats and greases in good demand. Choice white grease, 8⅞c. per pound; stearins, 10.61c. per pound; inedible tallow, prime, 8⅝c.

Animal Oils

Lard.—Situation continued to be featured by a shortage of supplies of raw material, a good demand for finished product, and a firm tone.

Neatsfoot.—Spot oil in light supply, and few sellers apparently in a position to offer for nearby delivery. Inquiries numerous.

Chicago, May 14.—Lard oil, No. 1, 14½c. per pound; oleo oil, No. 1, 13¾c.; tallow oil, acidless, 13¾c. per pound, tanks.

Waxes

Further quantities of carnauba wax, and also some shipments of beeswax from Brazil, arrived on this market last week without, however, resulting in any important increase in the stocks warehoused by dealers against new orders. Forward sales obligations steadily absorb the quantities reaching this market and leave an unsatisfied margin of consumer requirements about which very little can be done at this time. Of some interest was the receipt from the Texas border of proposals for business in candelilla wax—which, on this market, is usually factored only through an official banking connection of the community-producers in Mexico. It was understood that any quantity up to 40,000 pounds was offered a broker in this city.

—O-P-D—

Paint Technicians Discuss Problems

—*Continued from page 40*

Wood interior gets a coating of pressure primer (52-W5) and two coats of the fire-retardant white. Teredoproof copper naphthanate is used under water and three coats of copper bottom paint. Exterior wood gets a coating of toxic water-repellant plus white plus camouflage. These materials are covered in the April 15 issue of paint testing.

The navy is endeavoring to use existing specifications and test methods. It has a new 52-18 primer for steel in process; it looks for an eight-hour-dry primer, and is considering the Holabird primer for equipment with a view of its adoption. A new camouflage specification with 35 percent P-V ratio and a new fire-retardant white, 58 percent P-V using antimony oxide are coming. Leveling and spreading tests are being made by the Southern States Paint and Varnish Production Club.

Other specifications mentioned by Lt. Aldrich were 52-R 11 for alkyds, 52-R 10 for paraphenols, 52-D 9, those for coatings of interiors of drinking water tanks, 52-P 41 for air-drying gilsonite, and 52-P 17 for baked phenolic. Drying of tank interiors offers a problem. The army thermosetting coating, formulated by the federation, is being tried out.

Cooperative Projects

Four cooperative programs are under way with the Holabird ordnance laboratory on comparisons of coatings. These, said Major Totten, cover (1) lusterless enamels, (2) metal primers, (3) lusterless conservation coating, and (4) wood finishes. More than fifteen companies are participating in the first. Fifty primers are under test, comprising eleven pigments and eighteen vehicles. Their six months' exposure is not considered sufficient. Sixty samples of conservation coating are being tested and a report on them is being prepared. Practical protection is found possible with some sacrifice of drying time and color; varnish resins are replacing alkyds in flexible, adhesive metal coatings with satisfaction in color and chalking up to 50 percent substitution, but there is slower drying and less hardness. The change will be made first in products that can be baked.

Several hundred panels of wood finishes are being exposed to test lusterless olive drab enamels. Their six-month exposure is not enough for final conclusions. Too short drying gives poor results. Omission of wood preservative has no effect. Proper priming is essential. A large variety of pigments and vehicles is represented. Organic under coatings are found better than pressure treatment.

Permanent Camouflage

John Moore, of the Sinclair Oil Company, chairman of the federation's technical advisory committee, said that the Office of Civilian Defense would like to have a camouflage coat-

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ing better than T-1215, which would last for two years, rather than six months. The purpose is to provide a paint for the "neutral" painting of industrial buildings as a move in OCD policy.

Another request for an asphalt emulsion type base for roads and parking spaces has been referred to the Los Angeles club, Mr. Moore said.

The camouflage formula T-1215 was discussed by D. H. Parker, of the pigment division of E. I. duPont de Nemours & Co., who said that the first specifications were unsatisfactory—or at least were not satisfactorily complied with—in the matter of durability. The need indicated was for (1) lightfast prime pigments; (2) durable extenders, to avoid cracking and the like; (3) pigment volume as low as possible (50 percent); (4) high hiding power through high ratio of prime pigment to extender; (5) use of zinc oxide. Barium sulphate and silicate extenders are safest, although calcium carbonate or sulphate is satisfactory under some conditions.

Green T-1215 is hardest to make durable, Mr. Parker said, with copper phthalocyanin and chrome oxide scarce. Use of chrome yellow and iron blue was advised.

A study of the durability of olive drab lusterless of high infrared reflectance value was reported by Harry Feinberg, technical director for the H. B. Davis Company, Baltimore, who stressed the necessity that this coating, in camouflage painting, have a high reflectance or be transparent to infrared. Tests covered twenty-three pigments. The best results were shown by mixed organic toner, black toner, indanthrene blue, phosphotungstic acid malachite green, phosphotungstic acid brilliant green, phosphomolybdic acid brilliant green, indigo, phthalocyanin blue, C.P. or reduced.

A three-dimensional scheme of measuring color differences and stating them in simple numbers was presented by Francis Scofield, of the Institute of Paint and Varnish Research. It is based on a scaling of spectrophotometric or reflectrometric readings. Mr. Scofield believes that his system, shortly to be published in detail, is superior to the Munsell system in that it derives directly from measurement of the sample and is continuous; also it is wholly objective.

The F.P.V.P.C. symposiarians joined the Cincinnati - Dayton - Indianapolis - Columbus Paint and Varnish Production Club at dinner in the evening, and later joined variously in the annual meeting of the local group.

—O-P-D—

Buy War Stamps

Linseed Oil Limits For Paint to Be Set

—Continued from page 7

run into a deficit of some 78,000,000 pounds by September 30, 1944. By adoption of a formula calling for one-third raw linseed oil, one-third bodied linseed oil, and one-third thinner, it was found that a savings of 20 percent of the oil now in use could be effectuated.

It is not anticipated that this formula will be written into the order, but rather that the total amount of linseed oil going into the manufacture of paints will be limited on a poundage basis, which would permit the use of more or less of the raw linseed oil as the manufacturers might find best suited to their purposes.

—O-P-D—

Drying Oils for Wrinkle Finishes to Be Allocated

OPD Washington Bureau

The Fats and Oils Branch of the Food Distribution Administration, in cooperation with the protective coatings section of the War Production Board, has announced that tung oil will be allocated for the manufacture of wrinkle finishes during June only to those manufacturers whose approved listing under army specification ES-680, classes 541 and 542 is based on the use of tung oil. Effective July 1, no tung oil will be permitted for meeting these specifications.

Oiticica and dehydrated castor oils will be allowed for use during June and July, in place of tung oil. Effective August 1, neither castor, tung nor oiticica oil will be allocated for wrinkle finishes.

The Fats and Oils Branch furthermore indicated that it will be the responsibility of the manufacturer of wrinkle finishes to properly identify his primary product on PD-600 applications for these oils.

—O-P-D—

Chicago Rubber Group To Elect Officers June 4

At a meeting of the Chicago Rubber Group April 30, Dr. H. A. Winkelmann, research director for the Dryden Rubber Company, spoke on "A Comparison of the Synthetic Rubbers." The next meeting of the Chicago Rubber Group is scheduled for June 4 in the Mural Room of the Morrison Hotel. The speaker will be G. A. Taylor, of Stanco Distributors, who will discuss the "Compounding and Processing of Butyl Rubber." The election of officers for 1943-44 will also be held.

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North African Argols and Calcium Tartrate Hoard Freed When Germans and Italians Surrender to Allies—Packaged Drugs Prices Ceiled—Simpler Ascorbic Acid Allocation

Unconditional surrender last week of German and Italian forces in Tunisia had a meaning for makers of tartaric acid. With North Africa now entirely controlled by the American, British and French allies, a share of the large stocks of argols and calcium tartrate known to be stored in Algeria and Tunisia may begin soon to move to the United States. The two countries exported 5,799,672 pounds of argols and 658,521 pounds of the tartrate to the United States in 1939, the year World War No. 2 began. And 159,046 pounds of argols came from Morocco. The present shortage of tartaric acid raw material makes resumption of North African exports highly desirable.

Government regulatory acts last week included an amendment of the WPB General Preference Order M-269, thus simplifying ascorbic acid allocation. A revision of price regulation of crude and refined glycerin by WPB was also noted. And that board also amended its silver conservation order M-199, changing the manufacturers' quota periods for domestic silver purchases. Of importance to silver bullion buyers was the Senate Banking Committee approval of a bill raising the price of Treasury-held silver 26.36c. per ounce when said silver was sold for domestic purposes.

Accumulating of alcohol stocks brought out once more the proposal to permit whisky distillers occasionally to make liquor instead of confining their total operations to the manufacture of industrial alcohol. It seems to be mainly a matter of storage facilities, notwithstanding the recent government declaration that it had large facilities that had not yet been used.

OPA ceiled prices on all packaged drugs, excepting those that are botanical. The order, MPR 392, is effective May 26 and for the most part continues the GMPR prices and requires makers to print the retail ceiling price on the labels of all proprietary medicines.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
241.0	241.0	241.5	239.6

Market news that may have developed after this report was sent to press will be found on page 4.

Acid, Ascorbic.—Under an amendment to General Preference Order M-269, the War Production Board on May 10 simplified its method of allocating this material. Use of Form PD-600 was abandoned. The allocation month was changed to the regular calendar month. Details elsewhere, this issue.

Acid, Tartaric.—With Algeria and Tunisia in the hands of the Americans, British and French allies, makers of tartaric acid naturally look ahead eagerly for that time when shipping space will be allocated on returning military supply ships for the purpose of bringing to this country the large stocks of argols and calcium tartrate known to exist there. An idea of former imports from those points is gained from Department of Commerce records showing 1939 arrivals from Algeria as 5,429,607 pounds of argols and 509,127 pounds of calcium tartrate. From Tunisia, 370,065 pounds of argols and 149,394 pounds of calcium tartrate. Add to these figures the 1939 export of 159,046 pounds of argols from Morocco and the importance to tartaric acid makers of having these primary markets entirely in the hands of the Allies is readily seen.

Alcohol.—Reports continued to suggest that stocks of alcohol for the synthetic rubber and other war-caused production programs are accumulating. This has caused some talk of returning whisky distilleries to a part time production of "fire water" the supplies of which were said to be rapidly dwindling. WPB is said to have ample authority in this matter since under the original regulation ordering whisky makers to turn to full time production of industrial alcohol, the director general for operations for WPB was authorized to "take all or any part" of a distiller's production of alcohol for the war needs.

Amyl Acetate. — Consumption accounts readily for current production of material made from both fusel oil and pentane. Prices very steady.

Argols.—See tartaric acid report for a presentation of the potentially improved position of tartaric acid makers in the matter of raw material supplies.

Bismuth Metal and Salts.—Consumption reported in good volume. Need for salts being met on fairly prompt delivery basis. Undertones firm.

Caffeine.—Consumers could use far more of this item than they are able to get. Hardly any need for a government formal allocation of the material because the leading makers are doing virtually that in order to eke out the restricted production possible at this time.

Castor Oil.—Total arrivals of beans since January 1 now totals 125,294,650 pounds. Latest arrival, 9,293,400 pounds. The total is substantially below the January-May, 1941, arrival of 165,498,326 pounds, but is far ahead of the January-May, 1940 total of 98,659,842 pounds. By comparing the total import in 1939, last full year before the war reached its full influence—162,610,861 pounds—a fuller understanding of how all-out war has raised the needs of the United States is gained.

Chicago, May 12.—Castor oil continues firm. Prices are:—Cold pressed, U.S.P., returnable drums, car lots, 14½c. per pound; drums, less than car lots, 15¼c.; tanks, 12¾c.; No. 3, extracted, returnable drums, car lots, 14¼c. per pound; drums, less than car lots, 15c.; tanks, 13½c.

Codliver Oil.—Arrivals totalling 980 drums and 126 barrels noted. Ready-made market exists for goods obtainable out of spot stocks.

Fish Liver Oils. — Fully firm and growing in strength as government and civilian takings cut into available reserves.

Los Angeles, May 12.—The market on vitamin oils has shown an unyielding firmness, especially in the lower potency materials, where a scarcity exists. 100,000 unit A oil is named strong at 16c. per million units. Lower potencies are bringing ceiling prices.

Formaldehyde.—WPB allocations for May were as follows: Granted in full

Association Meetings:—

Proprietary Association, Biltmore Hotel, New York, May 18 and 19.

Association of Food and Drug Officials, Cosmopolitan Hotel, Denver, Colo., May 24 and 28.

National Association of Insecticide and Disinfectant Manufacturers, Statler hotel, Cleveland, June 7 and 8.

American Pharmaceutical Manufacturers' Association, The Homestead, Hot Springs, Va., June 14-17.

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 9

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Manufacturers of
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VITAMIN A CONCENTRATES
VITAMIN A AND D CONCENTRATES
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Distilled Vitamin A Concentrate in the natural Ester form is two to ten times more stable in heat, light and air than any other commercial concentrate we have tested. We invite you to check this fact, and its resulting economies.

DPI Vitamin A Concentrate is continuously available, independent of war-curtailed Japanese and Norwegian raw oils. Scientifically uniform in quality. High in potency. Exceptionally bland.

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for manufacture of pentaerythritol, paraformaldehyde, rubber chemicals and commercial explosives. Granted in full for use in agriculture and in export. Granted to the extent of ninety percent for manufacture of hexamethylenetetramine, phenolic resins, polyvinyl resins, alkyd resins, and embalming fluid. Granted to the extent of sixty percent for the manufacture of other civilian items, cosmetic closures, cosmetic containers, and calender bases. The following exceptions were made to this policy: Urea resin adhesive for civilian furniture, fifty percent; adhesives for shipping containers, 100 percent; medicinals, 100 percent; printing inks, 100 percent; matches, 100 percent; and coagulant, 100 percent.

Glycerin.—Office of Price Administration revises maximum price regulation for sales of crude and refined material to fit it in a few respects more exactly to conditions in the industry was made May 12 through Maximum Price Regulation No. 38. Becomes effective May 17. New definition of "converter" results in exclusion of most wholesale druggists from coverage by the regulation. The term "carload" is redefined. Also the term "case." Converters' sales become f.o.b. converters' shipping point. Complete details elsewhere.

Chicago, May 12.—Demand for glycerin holds up well. Tone of market firm. Inquiry good. Prices for both chemically pure and high gravity are:—Tankcar, 18c. per pound; drums, car lots, 18¼c.; drums, less than car lots, 18¾c.

Pectin.—War Food Administration says pectin industry expects to meet all civilian and military needs in 1943. Production equal to six million pounds of powdered material will be nearly twice the normal output.

Quicksilver.—Little change in strong market where consumption rules at high levels and producers' needs are taking out each flask as mined.

San Francisco, May 12.—No material change noted in quicksilver market. Situation remains steady. Producers well sold ahead, although spots are obtainable. Labor situation at mines is causing some concern over production. Named at $191 to $192 per flask.

Silver Bullion. — Manufacturers quota periods for domestic silver purchases put on a quarterly basis by an amendment to the conservation order M-199. Senate Banking Committee approves bill to make the price of 71.11c. per ounce to prevail on all sales of Treasury-held bullion for purposes of manufacture. The legislation, if effected, would die six months after the war—perhaps.

—O-P-D—

Trade Briefs

Norwich Pharmacal Company, Norwich, N. Y., has received the army-navy "E" production award.

Lexington Chemists, Inc., this city, has changed its capital from 100 shares no par value to $10,000 in $100 shares.

Henry P. Bristol, president of the Bristol-Myers Company, has accepted the chairmanship of the Manhattan drugs division of the Greater New York Fund campaign.

Wide-Mouth Glass Container Prices Ceiled

—*Continued from page 3*

Consumer's Goods Other Than Apparel.)

Special provisions in the regulation cover new standardized containers—first offered for sale in February, 1942—and glass containers sold in new types of cartons.

However, no new type of wide mouth container may be offered for sale under today's regulation until a maximum price for it has been specifically approved by OPA. Manufacturers may suggest ceiling prices for a whole line or for an individual model. By formula, based on the selection of a comparable container produced by the manufacturer in his line before February, 1942, the manufacturer is allowed to compute his own suggested ceiling for the new containers. The suggested prices under the formula will be in line with prices, costs and margins over the old and comparable container. This step has the effect of placing all wide mouth ware—both new and old—at the July 1, 1941, level.

After August 6, 1943, manufacturers will be subject to WPB's simplification program which is expected to restrict wide mouth ware to about 50 styles, including its recommended wartime standard line. The program is expected to result in the production of 6,000,000 more gross within the industry's present productive capacity. However, since heavier and non-standard capacity containers are still on the market, the price regulation affects all containers.

—O-P-D—

Merrell to Manufacture Quinacrine Tablets

The Wm. S. Merrell Company, pharmaceutical manufacturer, Cincinnati, has been selected by the War Production Board as one of the additional producers of quinacrine hydrochloride tablets.

A separate building adjacent to the Merrell manufacturing laboratories is being equipped for the talbeting process. The quinacrine will be supplied to the Merrell Company in bulk under a subcontract by the Hilton-Davis Chemical Company, Cincinnati. The Merrell Company will be licensed for the duration to sell these tablets to the army, navy, and lend-lease.

'Sal Hepatica' Hit By F.T.C. Order

—*Continued from page 3*

treatment for headaches except where such condition is caused by the failure of the proper evacuation of the lower intestinal tract; or that it will enable one to stay clear-headed and alert or is of any value in promoting such conditions except in those cases where the absence of such conditions is due to the failure of a proper evacuation of the lower intestinal tract.

—O-P-D—

National Drug Elects A.B. Collins President

Alfred B. Collins has been elected president of the National Drug Company, manufacturer of biologicals, biochemicals and pharmaceuticals, Philadelphia. Mr. Collins has been connected with the company for eleven years and has held the posts of comptroller, general manager, and executive vice-president successively. Charles E. Carr, former president and treasurer for many years, has been elected chaiman of the board and retains the position of treasurer.

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- CACODYLIC ACID, C. P.
- SODIUM CACODYLATE U. S. P. XII
- IRON CACODYLATE (Ferric) C. P.
- MAGNESIUM CACODYLATE
- CALCIUM CACODYLATE
- BISMUTH CACODYLATE
- GUAIACOL CACODYLATE
- SODIUM MONOMETHYL ARSENATE (Arrhenal)
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U.S.P. Resublimed Crystals and Gran.
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A grade of Alum Ammonio-Ferric suitable for general industrial processes.

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★ **POTASSIUM IODIDE**
U.S.P. Cryst., Gran., Powd. . . . A.R. Cryst. and Gran.

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OPD—5-17-1943 52

BEHIND THE BATTLE-LINES

"... There is no good answer to taking care of the wounded after dark near the combat line. When a casualty is brought in, you just have to have somebody hold a poncho over you and somebody else get under there and hold a flashlight for you, while you grope around to try to find a wound and patch it up the best you can, and wait till daylight for whatever else it needs." ... A Medical Corps officer recently made this statement in a press dispatch.

Many of the materials from which life-sustaining medicaments are made are supplied by S. B. Penick & Company. These essentials are used by hard-working military medical men in battle-line dressing stations and base hospitals. Rare alkaloids—atropine, homatropine, emetine; plant extracts, and other fine medicinal chemicals originate in this, the world's largest botanical drug house. Write for prices, spot or contract shipments.

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THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

Botanical Drugs, Spices and Gums

German and Italian Total Defeat May Revive Botanical Exports From North Africa—1939 Exports Totaled 32 Million Pounds, Exclusvie of Moroccan Goods

Pushing aside price advances and sales of botanical medicinal drugs from their normal position of importance in the market, there remains the success and climax of the British American and French arms in the North African campaign to throw the axis forces out of North Africa. Last week found the Allies in Bizerte and Tunis and in full control of Tunisia, including Cape Bon, where the remnants of the German-Italian military forces, packed tight as cigarettes in a package, made a puny and very weak last stand. It certainly was no "Stalingrad."

What can that mean to the botanical drug market? Well, and first, Secretary of the Navy Knox on May 11 said that the United Nations victory will open the Mediterranean sea to the Allies, which, in turn, will reduce the distance for Allied shipping to the Arabian gulf area by about 5,000 miles. What is true of goods going out is equally true of merchandise to be transported to the United States.

Eliminating French Morocco, from whence comes in normal times a considerable amount of crude drug merchandise, there remains the botanical products of Egypt, Aden, Turkey, Tunisia, Algeria and Syria. A quick survey of what these countries have supplied the United States in times of peace establishes a total of 32,364,601 pounds. This was the 1939 record. It was comprised of shipments of senna, aloe, licorice, fenugreek, sesame, poppy, opium, numerous roots, and a group of items classified only as miscellaneous.

If trade follows the flag as normally it does, goods from all North Africa stand a good chance of being forwarded eventually since ships that carry the supplies of war provide a space for return cargoes which will be utilized to bring forward accumulated stocks of botanicals if so to do does not interfere with the further job of bringing the European armies of the Axis to unconditional surrender on the European continent.

Balsams

Fir.—Consumption of Canadian balsam by reason of war necessities keeps supplies for civilian use definitely conservative.

Tolu.—Steady to firm but mainly of jobbing interest to consumers.

Barks

Cascara Sagrada.—Future situation still under a cloud. Size of new crop controlled by available labor supply. Lumbering operations likely to draw on labor formerly devoted to cascara peeling.

Elm.—Select lowered to 18c. to 19c. per pound.

Soap.—Comparatively steady at moment. Not much demand of persistent and substantial sort. Considering transport difficulties, values considered favorable.

Beans

Calabar.—Quoted but not appearing in spot transactions last week.

Vanilla.—Direct shipments of Bourbons from source to spot desired. Primary market also supplies raw materials imperatively needed for war program. Problem is to get some shipping space allotted for beans. Relationships between those in control of primary market and those importing beans here definitely cordial and co-operative as well as satisfactory. Believed affirmative result will result from current negotiations.

Berries

Juniper.—Two spot quarters decide not to go along with advancing market. Quotations returned to minimum basis of 45c. per pound. Top price is now 55c. as result of reshuffling of position locally. Primary market values definitely firm.

Raspberries.—Scarce to the point of market being almost nominal in some quarters. New crop coming along should break situation. Cost likely to be higher this year, 'tis felt.

Flowers

Clover.—Until returns are in, doubt concerning ability to get in a full collection will persist. Labor will be scarce.

Elder.—Situation quite the same as in clover tops. It will be a problem to get adequate labor for collection activities and its solution has still to be effected.

Mullein.—No over-supply likely but believed that consumer needs will be met within reasonable limits.

Poppy.—Some are beginning to think about getting replacements direct from primary market.

Saffron.—Still easy in position and subject to slow, irregular demand for the Spanish item. No change in the already low prices.

Gums

Arabic.—Some of the starch has been washed out of the market for this material and it was readily obtainable at 18c. per pound last week. There was some reason to think that 17½c. per pound might be done, but not in long-established first-hand quarters. Near East military success forecasts resumption of shipments from source via Suez canal and the Mediterranean sea.

Karaya.—Substantial arrivals have eased stock position of some consumers. Warehouse supplies of dealers have not appreciated much by this

Price Changes

Drugs

Advanced

None

Reduced

Belladonna leaves, 15c. per lb.
Burdock root, 5c. per lb.
Dandelion root, 1½c. per lb.
Damiana leaves, 1c. per lb.
Elm bark, 1c. per lb.
Gentian root, whole, 5c. per lb.
ground, 5c. per lb.
powdered, 5c. per lb.
Henbane leaves, 25c. per lb.
Papain, powdered, 10c. per lb.
Sabadilla seed, powdered, 2c. per lb.
Stramonium leaves, 2c. per lb.

Spices and Gums

Advanced

Coriander seed, Indian, ½c. per lb.
Cumin seed, Persian, ½c. per lb.
Grains of Paradise, ½c. per lb.
Mustard seed, California brown, ½c. per lb.
Montana yellow, ¾c. per lb.
Washington yellow, 1c. per lb.

Reduced

Arabic gum, sorts, ½c. per lb.
Caraway seed, Syrian, natural, 3c. per lb.
Clove, Zanzibar, ½c. per lb.
Ginger, Cochin, bleached, ¼c. per lb.
Laurel leaves, Portuguese, ½c. per lb.
Pepper, red, chillies, Mombassa, ½c. per lb.
Tangaylka, ½c. per lb.

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
254.4	257.3	255.4	318.4

Market news that may have developed after this report was sent to press will be found on page 4.

Association Meetings:—

Proprietary Association, Hotel Biltmore, New York, May 18-19.

Current prices on botanical drugs and spices are given in the alphabetical list of prices beginning on page 9

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OF HOPKINS' ANALYZED HIGH-STANDARD
CRUDE DRUGS

If it is humanly possible to get it, Hopkins has it! The list of botanical drugs offered below is only a small part of those being supplied daily by us. But we can and *do* cooperate with our customers even beyond the limits of reasonable expectations. For your requirements, remember, the House of Hopkins has been the last word, for over 52 years, in every foreign and domestic botanical crude drug for which there is commercial demand.

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- ALTHEA ROOT
- ANISEED
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- BALSAM PERU
- BALSAM TOLU
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- BENZOIN GUM
- BOLDO LEAVES
- BUCHU
- CELERY SEED
- CHAMOMILES
- CINCHONA BARK
- COCILLANA
- CORIANDER
- CORN SILK
- DANDELION
- ERGOT
- FENNEL SEED
- FOENUGREEK
- GENTIAN ROOT
- GINGER
- GUM ARABIC (all kinds)
- HELLEBORE RT. White
- HENBANE
- HOREHOUND
- IPECAC
- IRISH MOSS
- JUNIPER BERRIES
- KOLA NUTS
- LAUREL LEAVES
- LAVENDER FLOWERS
- MARJORAM
- OLIBANUM GUM
- ORANGE PEEL
- PAPAIN
- PEPPERMINT
- PSYLLIUM SEED
- QUINCE SEED
- RHUBARB ROOT
- ROSEMARY
- SAGE
- SARSAPARILLA
- SENNA LEAVES & PODS
- SQUILL ROOT
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- STROPHANTHUS SEED
- THYME LEAVES
- UVA URSI
- VALERIAN
- WHITE SQUILLS

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- BALSAM TOLU
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- BOLDO LEAVES
- BORAGE FLOWERS
- BUCHU LEAVES
- CARAWAY SEED
- CELERY SEED
- CHAMOMILE FLOWERS
- CHAULMOOGRA OIL
- CLOVES, Zanzibar
- COCILLANA BARK
- COLOCYNTH PULP
- COLOMBO ROOT
- CORIANDER OIL AND SEED
- CUMIN SEED
- DANDELION ROOT
- DILL SEED, Indian
- ERGOT OF RYE
- FENNEL SEED, Indian
- FOENUGREEK SEED
- GENTIAN ROOT
- GINGER, Jamaica, Calicut
- GRAINS OF PARADISE
- GUM ARABIC AMBER SORTS
- GUM KARAYA
- HELLEBORE ROOT WHITE
- HERBA HERNIARIÆ
- HERBE MENTHE
- HOREHOUND HERB
- IRISH MOSS
- JUNIPER BERRIES
- KAMALA POWDER
- LAUREL LEAVES
- LAVENDER FLOWERS
- LINDEN FLOWERS, with Leaves
- MAHUANG, Chinese
- MARJORAM LEAVES
- NUX VOMICA
- OAK MOSS
- ORANGE OIL, Sweet
- ORRIS ROOT
- PEPPERMINT OIL
- PIMENTO, Jamaica
- POPPY SEED, Indian
- PSYLLIUM SEED AND HUSKS
- QUINCE SEED
- RHUBARB ROOT
- ROSEMARY LEAVES
- ROSEMARY OIL
- SAGE LEAVES
- SARSAPARILLA ROOT
- SAVIN OIL
- SAVORY
- SENNA LEAVES AND PODS
- SESAME SEED, Hulled and Natural
- STRAMONIUM LEAVES
- STROPHANTHUS SEED
- THYME LEAVES AND OIL
- UVA URSA LEAVES
- VALERIAN ROOT

- AMINOPHYLLINE
- BARBITAL
- COD LIVER OIL, Medicinal and Poultry Grades
- EPHEDRINE SALTS
- GUM CAMPHOR, Japanese and Domestic
- ICHTHAMMOL, N. F.
- MENTHOL, Japanese
- STRYCHNINE SULFATE
- VITAMIN PRODUCTS
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INDUSTRIAL CHEMICALS

GUM ARABIC

LANOLINE Anhydrous

MILK SUGAR U.S.P.

event. Movement to spot may be accelerated by clearing of Mediterranean sea route.

Mastic.—Odd lots appear and disappear with amazing irregularity. There is no definite warehouse stock of the item.

Tragacanth.—Haul from source to spot could be shortened when Mediterranean sea is again opened for commerce freighters. Meanwhile, spot market holds very steady.

Herbs and Leaves

Belladonna.—Down goes the price and the market becomes minimum at $1.30 per pound. Conditions favor buyers to a substantial degree. The price decline since last August 1 totals $2.15 per pound on spot.

Henbane.—Competition was much sharper and the minimum and lower price of $1.40 per pound compared with the top ranking quotation of $1.75.

Henna.—This item has weathered war conditions because:—First, the stock in reserve was more than ample; second, because it has been possible to tap the source.

Senna.—Consumer needs have been well cared for. Alexandrian leaves may have a greater chance of getting here once commerce is again open via the Mediterranean sea route—which, so far as opportunity goes, will come since the Axis has been dislodged from its late position athwart the normal trade route.

Stramonium.—Shaded under competition to basis of 24c. to 25c. per pound and none too steady market.

Miscellaneous

Cantharides. — Some wonder how soon Russia may be able to get some flies started to this country as the result of the present military situation in the Near East.

Ergot.—Dull and comparatively easy with conditions favoring anyone with firm orders in hand.

Peat Moss. — Russia is using this item as a substitute for cotton on surgical dressings after proper sterilization. Reports give it somewhat superior qualities.

Papain.—The market has become more competitive with the acquisition

—Continued on page 55

Argentina Casein Importation Allowed

—Continued from page 3

Argentina and that it may mean the importation of other products from that country of which there is great need in the United States—linseed oil for example. Reports have it that Argentina has such a surplus of flaxseed that it is being used for fuel.

It is common knowledge that the government has done little to encourage the importation of products from Argentina because of its refusal to go along with the other American Republics in breaking off diplomatic relations with the Axis. But this is a subject that officials preferred not to discuss and insisted that insofar as casein is concerned it just so happened that shipping space was available to bring the product to the United States and because of the extreme shortage of casein supplies here the permits were granted.

—O-P-D—

Copper Sulphate Ceiling Revised

—Continued from page 5

Amendment No. 2 to Maximum Price Regulation No. 354 (Copper Sulphate), which becomes effective May 17, 1943.

The changes include a reduction fo 10 cents per 100 pounds in manufacturers' maximum prices for quantities of less than 36,000 pounds of monohydrated cooper sulphate produced in eastern territory and sold in drums. The new ceiling of $9.95 is in line with the ceiling previously established by the regulation for other quantities and containers. The prices originally established were based on an erroneous calculation of container and quantity differentials.

A similar correction results in an increased base price for manufacturers' and distributors' sales of copper sulphate crystals produced in western territory. The base price of $5.10 previously set for sales in barrels of 400 to 500 pounds in quantities of 15 tons or more is changed by the Amendment to $5.20.

CRUDE DRUGS

PEEK AND VELSOR INCORPORATED
100 GOLD ST.
NEW YORK

ESTABLISHED 1840

WAREHOUSE AND MILLS, JERSEY CITY, N.J.

USP

LICORICE

HISTORY

The first record of its medicinal properties was left by Theophratus, the 3rd century B. C. Greek philosopher. He wrote of the sweet root as good for coughs, and said it grew near Lake Maeotis—the Sea of Azov today and precisely where the Russians are hitting the Huns hardest.

The English name *Liquorice* derives from *Liquiritia*, a corruption of Glycyrrhiza through its medevial form *Gliquiricis*.

USE TODAY

Is a Laxative and Expectorant In Modern Medicine

BOTANICAL NAME	TEST	COMMON NAME
Glycyrrhiza glabra		Sweet wood

Yields not more than 2½% acid-insoluble ash.

Packaged Drugs Ceiled by OPA

—Continued from page 3

Administration officials pointed out that the regulation has been made complete to meet with fairness the large variety of situations arising in this industry. At a series of conferences with manufacturers, wholesalers, and retailers, this industry has requested and approved the more complete and elaborate formulas required by the regulation.

Sales by physicians or other authorized practitioners and sales on prescription are not covered by the action, nor are sales of botanical drugs, such as bark, leaves, herbs and roots, essential oils, and fine chemicals other than household staple family medicines.

For manufacturers, the regulation features a pricing mechanism geared to his own production cost experience in developing his own line of drugs rather than the General Maximum Price Regulation method of establishing maximum prices by comparison with a competitor's line of "similar" goods. This important change is accomplished by definition of "most comparable" commodity and by restricting it to include only the products produced by the manufacturer himself.

The new measure, Maximum Price Regulation No. 392, effective May 26, 1943, also accomplishes control of prices at the wholesale and retail levels with a minimum of administrative burden on the retailer and wholesaler. Retailers and wholesalers will have no reports on prices to file with OPA, since manufacturers are required to determine not only their own maximum prices, but also wholesalers' maximum prices to retailers and the retailers' maximum prices to the ultimate consumer on all new products, changed-size packaged drugs, and changed-formula packaged drugs in accordance with the provisions of the regulation for each specific situation.

Wholesalers and retailers are required to keep available manufacturer's notifications of ceiling prices or appropriate lists of maximum prices to meet requests from purchasers. For pricing of "old" packaged drugs—those which have undergone no substantive changes in quality or quantity since being priced under the General Maximum Price Regulation—all that is required of each seller, at all levels of distribution, is to continue selling the items at the prices established by the General Maximum Price Regulation.

The consumer should be able readily to determine when a price is excessive in the case of "old products" which he may buy periodically since the price should remain the same as he has been paying since May 1942. If the item concerned is suddenly raised in price the consumer should inspect the package for a retail ceiling price printed on it by the manufacturer, which means that a substantive change in quantity or quality has taken place. If no price appears on the package the consumer is entitled to check the seller's list of maximum prices or to ask to see the maximum prices determined for the seller by his supplier.

Packaged drugs for which maximum prices were not established by the manufacturer under the General Maximum Price Regulation are divided into two broad pricing classes:—(1) New items, that is, those sold under a different name than those for which the manufacturer already has established ceiling prices and (2) all drugs sold under the same name as drugs for which prices have been established previously but which have been changed in form, quantity, container, or formula.

—O-P-D—

Spice Trade Ass'n Elects J.B. Bond

J. Bosley Bond, of the Wixon Spice Company, Chicago, was elected president of the American Spice Trade Association at its thirty-seventh annual meeting, held May 11 and 12 in the Astor hotel, this city. Other officers elected were:—Vice-president, William Archibald, jr., of Van Norden & Archibald, this city, and treasurer, Harry Schlicting, of the B. H. Old Company.

Major topic of discussion at the session concerned the current supply situation of spices and condiments.

Botanical Drugs

Miscellaneous

—Continued from page 54

of new supplies. Powder noted around $3.65 to $3.75 per pound.

Roots

Althea.—Price range narrowed to basis of 68c. to 76c. per pound and prevails according to seller.

Burdock.—Easier under competition. Lower at 32c. to 33c. per pound.

Dandelion.—Reported lower at 26½c. to 33c. per pound and said to be weak.

Gentian.—Lower. Whole, 43c. to 45c. per pound; ground, 48c. to 50c.; powder, 49c. to 51c. Continues long extended downward trend and tendency of spot quotations, a movement attended by a deal of local competition.

Licorice.—Stocks bulk large and buyers appear seldom and few in number. Prices comparatively low. By clearing Mediterranean sea of Axis, chance favors the reestablishment of exports from Near East points eventually.

Mandrake.—The cost of collection may average high and the number of workers is likely to be small. Some concern felt concerning ability of primary market to produce a normal supply for podophyllin makers as well as other consumers.

Seeds

Caraway.—Natural Syrian lower at 54c. to 55c. per pound.

Coriander.—Indian seed moves into stock-eclipse and prices are nominal at 11¼c. per pound. Some seed grown in Peru is here but is withheld from the spot offerings.

Cumin.—Persian seed a fraction higher at 15¼c. to 15⅝c. per pound.

Hemp.—No stocks reported available.

Mustard.—Washington and Montana state growers not offering new crop futures at this time. Quotations, spot, higher at 11¼c. to 11⅜c. for Montana and 11½c. to 12c. for Washington yellow. California brown up to 17½c. to 18c.

Spices

Clove.—Zanzibar spice a fraction off at 20¼c. to 20¾c. per pound.

Ginger. — Some Cochin bleached root noted lower at 25¾c. to 26¼c. per pound. Jamaica root holding very steady at moment.

Paprika.—Arrivals total 1,605 bags.

Pepper.—Mombassa chillies, shaded to 22½c. to 23c. per pound. Tanganika chillies, off to 21c. to 21½c. per pound. Plan afoot for equitable distribution of the three-year stock of black pepper now warehoused in this country.

Pimento.—Steady on spot—if any be available. It would be very little at the best since most of the goods sent this country are unloaded at Southern ports or points.

—O-P-D—

Pfizer to Get "E"

Chas. Pfizer & Co., manufacturing chemist, this city, will be formally presented with the Army-Navy "E" Production Award for excellence in war production at its plant in Brooklyn May 24 at 4 p. m.

—O-P-D—

Irish moss production in Nova Scotia in 1942 was estimated at approximately 1,000,000 pounds, which is more than five times the 1941 figure.

Trade Briefs

Pamosa Mining Corporation, Salem, Livingston county, Ky., has been chartered with a capital of $50,000 for fluorspar and lead mining.

Corncobs industrial uses are being studied by the Department of Agriculture's Northern Regional Research Laboratory, Peoria, Ill.

Castor beans imported from India totaled 20,000 long tons in the official year ended March 31, 1942, as against 71,100 tons in 1940-41, according to the Department of Commerce.

Gum Tragacanth--- Gum Arabic
Importers
THURSTON & BRAIDICH, 286 Spring St., NEW YORK

VANILLA BEANS
ZINK & TRIEST CO.
15 Lombard Street Philadelphia Pa.

GUMS QUINCE SEED GALL NUTS
TRAGACANTH
ARABIC
D. S. DALLAL, 261 Fifth Avenue, New York
IMPORT MUrray Hill 3-0452-0453 EXPORT

GUMS
WHOLE AND POWDERED
TRAGACANTH * ARABIC
KARAYA (Indian Gum) * LOCUST BEAN
FRANK-VLIET CO., INC.
160 Water St., New York, N. Y.

ALGIN
THE COLLOID WITH THE UNUSUAL PROPERTIES
MADE TO THE MOST EXACTING STANDARDS BY
ALGIN CORPORATION OF AMERICA
24 STATE STREET
NEW YORK

PAUL A. DUNKEL & CO., Inc.
1 WALL STREET
NEW YORK, N. Y.
Hanover 2-3780

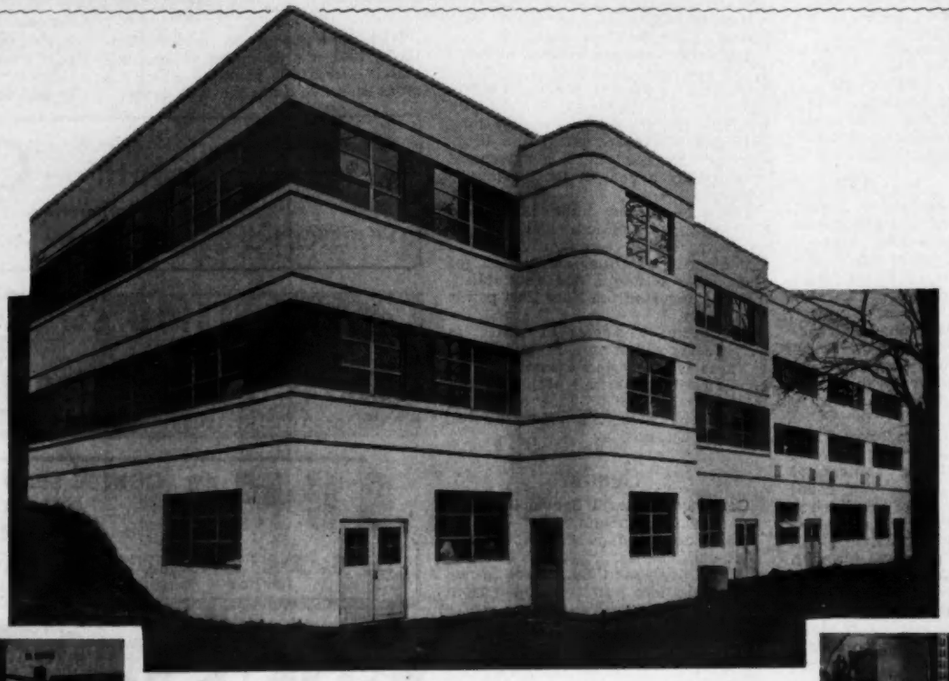
IMPORTERS AND EXPORTERS:

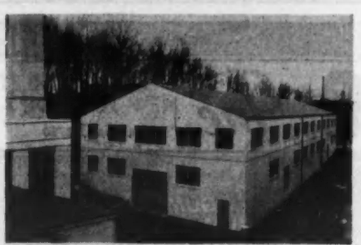
GUMS
CRUDE, POWDERED, PURE AND TECHNICAL
WAXES AND CHEMICALS

CHICAGO: J. H. DELAMAR & SON, 160 E. ILLINOIS ST.
NEW ENGLAND: P. A. HOUGHTON, INC., BOSTON, MASS.
PHILADELPHIA: R. PELTZ & CO., 38 KENILWORTH ST.
ST. LOUIS: H. A. BAUMSTARK & CO., 4030 CHOUTEAU AVE.

GUMS:
GUM ARABIC
GUM GHATTI
GUM ARABIC BLEACHED
GUM TRAGACANTH
GUM KARAYA (Indian)
GUM SHIRAZ
GUM EGYPTIAN
GUM LOCUST (Carob Flour)
QUINCE SEED
*
SPECIALTIES:
MENTHOL (Crystals)
PEPPERMINT OIL
CITRONELLA OIL
SPEARMINT OIL
TEA SEED OIL
*
EGG ALBUMEN
EGG YOLK
BLOOD ALBUMEN
JAPAN WAX
CANDELILLA WAX
*
CASEIN

BACKGROUND VALUES . . . a PART of the product, APART from the price





Photos, top to bottom: Loading a still preparatory to distillation . . . A part of the main still room . . . The new warehouse . . . Interior of warehouse.

A NUMBER of important oils and chemicals once produced for us abroad are now being manufactured in our own American plant under the skilled supervision of our staff specialists. The new building above, with its increased laboratory, distillation and warehousing facilities as pictured, represents a timely and invaluable enlargement of existing facilities. Now, many of the costly, hard-to-get materials, formerly bought through middlemen, are being manufactured by us and sold to our customers with resultant benefits of economy, convenience and assured high quality accruing in their favor. Typically, these advantages are all a PART of Fritzsche products, APART from their price. Why not let our representative prove in dollars and cents, how they can benefit *you*?

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BASIC PERFUMES
and
FLAVOR RAW MATERIALS

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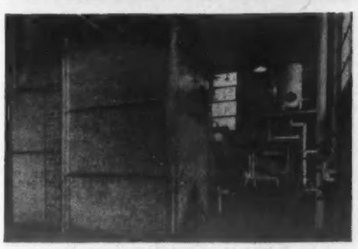
BRANCH STOCKS

BOSTON CHICAGO LOS ANGELES ST. LOUIS TORONTO, CANADA MEXICO, D. F.

FACTORIES AT CLIFTON, N. J. AND SEILLANS (VAR) FRANCE



Photos, top to bottom: Preparing a catalyst for large batch manufacture . . . Part of the Analytical Laboratory . . . Research Laboratory . . . Boiler room.

Eighth Annual Meeting

Toilet Goods Association

New York, May 12 and 13, 1943

Raw material supplies, production, containers and closures and pricing of the finished products constituted the subjects of discussion at the eighth annual meeting of the Toilet Goods Association, held in the Waldorf-Astoria, this city, May 12 and 13. More than 600 members and guests were in the attendance, the largest gathering. Herman L. Brooks, of Coty, Inc., was re-elected president.

The meeting opened with a scientific forum, with Dr. E. C. Merrill, of the United Drug Company, Boston, discussing "Conservation and Substitutes in the Formulation of Cosmetics,' and Dr. O. S. Gibbs, of Plough, Inc., discussed "Pharmacological Considerations in the Selection of Cosmetic Raw Materials." And "Information Please" on containers and closures closed the morning session of the initial session of the meeting.

The board of experts was composed of Alfred F. Brady, of the Hazel-Atlas Glass Company; B. Franklin Conner, of Colt's Patent Fire Arms Manufacturing Company; Richard M. Krause, of Richard M. Krause, Inc; J. H. Patterson, of F. N. Burt Company; F. Remington, of the Peerless Tubes Company; L. R. Root, of the Scovill Manufacturing Company; C. H. Vanlean, of the Vanderlean Tile Company, and Karl Voss, of the Karl Voss Corporation.

Herman L. Brooks
Re-elected President

Herman L. Brooks of Coty, Inc., opened the afternoon session with his report as president of the association. Hugo Mock, general counsel for the association, talked on "Legal Trends in the Toilet Goods Industry," and H. D. Goulden submitted his report as director of the board of standards of the association. A. C. Nielson, of the A. C. Nielsen Company, Chicago, discussed "Wartime Trends in the Merchandising of Toilet Goods," and Irene Stanley, of the St. Louis Globe Democrat, talked on "How Women War Workers have Influenced Cosmetic Trends."

The meeting Tuesday heard J. J. Toohy, of the Chemicals and Drugs Branch of the Office of Price Administration, and C. A. Willard of the Drugs and Cosmetic Section of the Chemicals Branch of the War Production Board. John S. Norton, of the Lambert Pharmacal Company, St. Louis, submitted a report of the special committee of proprietary toilet goods, in which he traced the formation of this committee and told of the various meetings during the year. Robert Abelow, executive director and regional counsel, discussed "Wage Stabilization and N.W.L.B." A voluntary plan of package simplification was submitted by W. E. Braithwaite, of the Division of Simplified Practice, Washington. The general meeting came to a close with election of officers and members of the executive committee.

Officers Elected

Officers elected were:—

President (re-elected) Herman L. Brooks, of Coty, Inc., New York; first vice-president, Paul R. Douglas, of Bourjous, Inc., New York; second vice-president, William M. Bristol, of the Bristol-Myers Company, New York; third vice-president, H. P. Willats, of Colonial Dames, and secretary, Joseph A. Danilek, of Lehn & Fink Products Company. S. L. Mayham continues as executive secretary.

The executive board now consists of three groups of six members each, previously it was five members. The class expiring 1943 were re-elected. For the group whose term expires in 1944 J. I. Poses, of A. A. Vantine was elected to replace Mr. Danilek, who was elected secretary; Cecil Smith, of Yardley & Co., Union City, N. J., replaced Paul Douglas who was named a vice-president, and W. Jacobs, of Button Company, and J. H. McShane, of Pacquin, Inc. For representative of associate members, nominated to the executive board were:—L. R. Root, of Scovil Manufacturing Company, New York, and A. L. Van Ameringen, of Van-Ameringen-Haebler, Inc., New York. H. Gregory Thomas was elected an honorary member.

President's Address

A year ago when we met our country had been at war only six months. Washington and industry were very much engaged in organizing and adjusting themselves to a very new status, Herman L. Brooks, of Coty, Inc., said in his address as president of the association. Contacts, Mr. Brooks said, were being established between them, on the part of business, to offer whatever services and cooperation that would be helpful, and second, to adopt working methods for the continuation of a reasonable portion of the civilian economy without hindering or interfering with the war effort.

Business was, during these days, Mr. Brooks recalled, frequently irritated and harassed by what it believed were unnecessary interferences and hampering. Government, he said, too, was annoyed by what it occasionally and too quickly assumed sometimes was the reluctance on the part of industry to go "all out." However, Mr. Brooks was of the opinion that a smooth working condition now exists between the industry and government.

Membership

The association, Mr. Brooks said, now has a total membership of 303, consisting of 216 active members and eighty-seven associate members.

War Activities

Regarding a questionnaire sent to members of the association, Mr. Brooks said that results showed that more than fifty companies are in war work, and of these fifty odd companies, more than half of the firms are manufacturing something quite aside from their regular lines. Of the companies answering the questionnaire, more than 4,000 employees are in the armed forces, which, he said, represents a large percentage of the total male and female personnel. Applying this same ratio, Mr. Brooks estimated that of the entire industry there are 6,000 employees in the armed forces.

Stephen Mayham
Executive Secretary

War Bond Purchases

From the replies to the questionnaire, Mr. Brooks said that it could be estimated that during the past sixteen months over $50,000,000 worth of war bonds have been purchased by toilet goods firms. Of the percentage of personnel in the industry buying war bonds regularly, the questionnaire, Mr. Brooks said, revealed that 86.1 percent of employees were buying bonds regularly.

Salvage Drive

The association, during the past few months, Mr. Brooks said, cooperated with the industrial salvage section of the War Production Board in collecting scrap and other materials. Undoubtedly, he said, firms outside of New York have responded to local appeals. From September last to date, he said, the committee here has been able to collect over 1,000,000 pounds and has received a word of commendation from this division of the War Production Board. He said that he has been asked to remind the membership that there must be no let-down in the effort to collect more and more scrap, for the need for it is, he said, greater now than it was six months ago, in view of the stepped up war production.

Exchange Bureau

Two years ago, Mr. Brooks said, it was suggested that an exchange bureau be established at association headquarters. This idea, he said, was prompted by the shortages that were then occurring and in the belief that surpluses would be exchanged by members. During the first eighteen months of its existence, he said, only a few "trades" were made, but he added during the past year, this exchange bureau has been extended to

Cosmetic Pricing Regulation

—*Continued from page 3*

Cosmetics affected are those sold to individual consumers and also to professional users and sellers, such as beauty shops and barber shops. Besides changes due to fashion that normally characterize the industry's products, the war has taken toll of such materials as alcohol, ammonia, glycerin, and castor oil, which are as essential in war weapons as in enhancing beauty. Castor oil, for example, is used to a large extent in making lipsticks; but it is necessary also as a hydraulic brake fluid for airplanes.

Close study of the industry and the meetings and conferences that have been held with its members during preparation of the regulation have resulted, OPA believes, in establishing methods for pricing new and changed products that are highly practical.

Methods of Pricing

For example, because of general shortages many retailers are selling products that they did not sell in March, 1942, and whose maximum prices it has been difficult for them to determine. Now several methods of pricing are provided. Under one of them the retailer uses a maximum price established by a special order of OPA that is now in effect for the particular packaged cosmetic.

Or if no particular retail price has been specified in an order, he may use the provisions of Section 2 (b) (1) of the General Maximum Price Regulation. These specify that he shall take as his retail price the maximum retail price established by his closest competitor selling the same packaged cosmetic.

However, if in using Section 2 (b) (1) he arrives at a price in excess of the manufacturer's suggested retail price, the retailer shall use the manufacturer's suggested retail price.

For all new products which are defined in accordance with limitations specified in the regulation, the manufacturer is to establish maximum prices for his own sales and uniform maximum prices for sales by wholesalers and retailers. For a new product this is done on the basis of a comparable product made by the manufacturer, which is in general a cosmetic in the same type of package (professional size or retail size) as the new packaged cosmetic, and is similar to it in price line, manner of distribution, use, form and quantity of cosmetic, and has the lowest retail or professional price per unit of quantity contained in the package. The manufacturer's maximum prices per unit of quantity for the new product are either his suggested or his maximum prices per unit of quantity for the most comparable product. Reseller's maximum prices are either the manufacturer's suggested prices or the prices generally charged by similar retailers.

This method of using a comparable product as a means for pricing a new one was chosen, OPA said, because there is no general or usual relationship between variations in cost and in selling price.

New Sizes

New sizes beyond certain tolerances also require the establishment of maximum prices at all levels. A 3 percent decrease in quantity of cosmetic does not require a change in price if caused by circumstances beyond the manufacturer's control, and in the case of packaged cosmetics designed to sell at retail for 5 and 10 cents this tolerance is increased to 20 percent. The 20 percent tolerance, OPA said, is in line with customary industry practice in the syndicate store field where quantity is varied with changes in cost in order to maintain retail prices of 5 and 10 cents.

Beyond these tolerances maximum prices for the new size are determined in general by reducing the manufacturer's suggested or maximum prices on the next larger old size proportionately to the reduction in quantity. At his option the manufacturer may adopt as his maximum prices on the new size his suggested or maximum prices on the next smaller old size.

In the case of new sizes larger than any old size, an increase of not more than 25 percent will not permit any change in maximum prices. Between 25 and 100 percent but not in excess of 100 percent increase, the maximum prices are determined by multiplying suggested prices per unit of quantity of the largest old size by 80 percent of the number of quantity units in the new size.

If the manufacturer cannot establish maximum prices for a cosmetic product because he has no comparable product, or the product exceeds limitations with respect to changed sizes established in the new regulation, he must apply to OPA at Washington for the determination of maximum prices for it.

Resellers must apply their customary discounts and allowances to the uniform maximum prices established by the manufacturer.

Changes in containers or packaging may be made without changing prices, and so may changes in formula. Abuse of the privilege of changing formulas through deliberate cheapening of products is believed by the price agency

—*Continued on page 70*

include offers and bids. Instead of only "swapping," Mr. Brooks said that the association have put interested members in touch with one another, and have let them work out their own deals. This activity, he felt, should be encouraged, and he suggested again that members report any surplus that they might have of something that they can no longer use or need.

Mr. Brooks said that as a result of an increase in membership by firms whose important part of their volume is in mouth washes, toothpastes, tooth powder, shaving creams, hair tonics, and similar products, a special committee was formed under the chairmanship of Jack Norton, vice-president of the Lambert Company, St. Louis.

Industry Advisers

In discussing the Cosmetic Industry Advisory Committee of the War Production Board, Mr. Brooks said that its sound purpose was to aid in deliberations about industry problems. He said that the committee has met in Washington four or five times, and he told how the committee prevailed on Washington not to issue certain restrictions and prohibitions that were not needs and which would have been unnecessarily burdensome to the industry. In further commenting on the committee, Mr. Brooks said:—

One of the policies in effect at the War Production Board is the one of secrecy under which the industry advisory committee meets and functions. The members of it, as I have told you, have done a splendid job, but they have been under this severe handicap, which is unfair to them and the officials as well. Oftentimes they are asked questions, and while they are capable of answering them, their replies would be more representative of the industry if they could first discuss them with others. On one hand, they are supposed to represent the entire industry, and on the other, they are prevented from conferring with it. One of the reasons given for the secrecy rule is that if everyone knew what is being discussed, some companies might try to "beat the gun." The strange part of it is that within 24 or 48 hours after each Advisory Committee meeting, secrecy notwithstanding, only two parties —the Democrats and the Republicans— usually know what took place. The source of our information?—"Shangri-La."

When manufacturers not members of the committee go to Washington soon thereafter and say that they understand certain things are about to happen, it must be a bit disconcerting to the officials of the War Production Board and other interested branches. I am sure that everyone would be much happier if the secrecy rule did not exist. I therefore strongly recommend that the industry request the War Production Board to eliminate this policy. I think it would be courteous on our part to ask the members of the committee itself if this protest will not be embarrassing to them.

Fair Trade Laws

In discussing fair trade laws and prices, Mr. Brooks said:—

From time to time in Washington I hear such comments as "fair trade laws tend to make for greater inflation. If prices were to find their own levels through competition, then the public would not have to spend as much for civilian goods as it now does under fixed prices." In other words, under the cloak of the war effort, some who have always been against fair trade would like to see the repeal of the Miller-Tydings Bill, which, in turn, would mean the breakdown of State fair trade laws.

While the association never actively engaged itself in the sponsorship of these laws, nevertheless most of the companies in this industry were and are in favor of them. I therefore warn you to be on the alert for any movement along the lines I mentioned which would result in the disruption of stabilized prices.

It is unnecessary for me to point out the chaos that would develop. I call this as well to the attention of the retailers in our audience who also have a great stake in this matter. I think it worthwhile to remember that even before OPA came into being our industry as a whole did not increase prices even though the cost of operation and prices of material were mounting suddenly, and I add that statistics would show that 90 percent of the companies at least are selling their merchandise today at the same prices of five years ago.

Trademarks

In touching on the elimination of trademarks, Mr. Brooks said:—

A matter in which we should be vigilant is the undercurrent movement to eliminate trademarked articles. The thought prevails in some quarters that in order to aid the war effort victory brands should be manufactured to take the place of tradenames. Those who favor this say that this would mean the standardization and simplification of production and that the labor and factory facilities in the plants then not needed could consequently be diverted to the war effort. The added reason is given that inasmuch as the public is eager to buy the products themselves, the identity of the maker is not important for the duration. This does not mean, however, as far as we are concerned, that if we can, if a reason exists for it, reduce our lines and simplify the retailers' problems under the circumstances, we should not do so. However, these steps can be taken without resorting to victory brands, for this is both economically unsound and contrary to American business practices.

These remarks are not uttered for the mere satisfaction of being critical, but for the purpose of calling your attention to the necessity of being alert to movements of one kind or another that some would like to impose under the guise of the war effort and then retain after the war. After all, those of us who are back home have a twofold duty—to contribute in every conceivable way to the winning of the war and to protect the home front so that when it is all over, we shall have a sound and substantial economy—not a system of fanciful theories and experiments.

Research

In discussing the utilization of substitute materials, Mr. Brooks said:—

I believe that the association should appoint a committee to undertake the study of the further development of those materials which we are now using as stop-gaps. We are using today—and this is with all apologies to our suppliers, for its understandable—certain things which have been hastily conceived to replace others no longer available. Many of them undoubtedly have a great deal of merit and if more thoroughly developed, might prove extremely worthwhile for post-war use.

A realize that every company by itself is probably now studying post-war plans of one sort or another. Manufacturers are, I know, jealous of certain intimate affairs about their business which they do not care to share with competitors. This, however, I do not believe is true of materials and supplies generally used for which no one can claim exclusive use. I therefore think that through this joint effort, the industry might encourage suppliers to spend money for the further development of these products in the hope that many things might result in which the industry would be interested.

Demonstrators

Mr. Brooks suggested the adoption of a uniform method for filing reports on demonstrators. In making the suggestion, he said:—

Many of you, and this applies to those who employ demonstrators, find it compulsory to file monthly reports with both the Federal government and the individual States, covering the Social Security payments for your demonstrators. At the present time I understand that forty such States demand these monthly reports. I wonder if you are aware of the fact that nearly everyone of these reports differ from the others, and that all of them differ from the report that must be filed with the Federal government.

I believe that a committee of comptrollers or treasurers should be formed to study ways and means of simplifying these reports. It might convince the various States to accept the same report which must be furnished the Federal authorities. If you are unaware of the amount of detail work that your office must undertake monthly I would suggest that you ask the person in charge how much of a nuisance this is and I am sure that he will be in favor of adopting a uniform method.

Sales Data

Mr. Brooks favored the collection of sales data from members of the association. In this connection, he said:—

For some years the association has attempted to secure sales stastistics and other interesting data that would be available, without names being furnished, to inquiring members. Our last attempt did not result in a very conclusive or comprehensive return. From

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time to time I have occasion to chat with officials in other trade associations, all of whom assure me that this kind of information has proved invaluable to their members. I would therefore suggest that we again attempt the collection of that data for your disposition whenever wanted.

Standards Developed

H. D. Goulden, director of the board of standards of the association, in reporting on the activities of that group for the year said:—

The war has affected the work of the board of standards to the extent that some of its functions have had to be relegated to the background while others have been brought to the fore, resulting in greater service to the industry.

The volume of labels and advertising copy submitted for review during the past year has decreased somewhat. Fewer labels were submitted for review due to the fact that fewer than usual new products were offered and old labels had been previously reviewed. The decrease in advertising copy submitted for review was probably caused by the trend to use more institutional rather than selling copy.

I trust that none of you are under the impression that the Food and Drug Administration or the Federal Trade Commission have, due to the pressure of war work, gone out of business. Such is not the case; your labels and advertising are being scrutinized to about the same extent as formerly.

Labels and Advertising

After reading the labels and advertising submitted for review as well as those not submitted for review, I would say that on the whole your advertising is very good and clean. However, there are still appearing in labels and advertising misleading statements and false claims. In these days when the demand for the products of the industry is greater than the supply, it does not seem necessary to resort to exaggerated claims and statements to sell merchandise. This practice reflects on the industry as a whole. It would appear that now is the best time to remedy this situation. Your board of standards is ready and willing to assist you in your remedial efforts.

Perhaps it is appropriate at this time to explain the policy of the board of review with respect to vitamin claims for cosmetic products. We do not take the position there is not merit to some of the claims that may be made for vitamins when incorporated in cosmetic products. Future research or that not yet published may show some of the claims to be justified; however, the Federal Trade Commission has made complaints and issued cease and desist orders against products of this type. Inasmuch as these orders have not been overthrown by the courts they constitute the criteria by which vitamin claims for cosmetics must be judged. Since it is the objective of the board of review to keep you out of trouble with the regulatory authorities, it does not seem wise to place our stamp of approval on copy which is in conflict with these cease and desist orders and which we know will get you into trouble.

Claims for Hormone Creams

It is our understanding that the Federal Trade Commission regards with disapproval some of the claims made for hormone creams. Some physicians are of the opinion that products of this type are dangerous and should not be offered to the general public for unrestricted use. Research designed to determine whether or not such products are harmful is now in progress and may also result in action by the Food and Drug Administration against products of this type.

I wish to report now on the activities of one of the association's most important committees. The scientific advisory committee has met some thirteen times during the past year and the members have concerned themselves with the development of standards for raw materials, the study of substitute or alternate raw materials and packaging problems, with special reference to closures.

Precipitated Chalk

The development of standards for raw materials has not progressed as rapidly as the committee would wish. There are two reasons for this, first substitute or alternate raw materials was a problem of immediate importance and therefore had to take precedence over the development of raw material standards, second, it was necessary to undertake considerable experimental work to develop satisfactory analytical methods. A standard for precipitated chalk was completed and distributed.

Titanium Dioxide

We have been working for the past few months on a standard for titanium dioxide. In order that you may have an idea of the amount of work involved in developing a standard, I will briefly discuss our work on this standard. You will recall that this material was chiefly used in paint and its purity from the standpoint of lead and arsenic was not of particular importance to the paint industry.

Titanium dioxide, because of properties peculiar to itself, would be a very useful cosmetic material, provided the right quality could be obtained. Therefore, in 1939 the board of standards took up the problem of obtaining satisfactory supplies of this material. Largely through this effort, there has been on the market for sometime titanium dioxide containing not more than 20 p.p.m. of lead and not more than 2 p.p.m. of arsenic.

Inasmuch as titanium dioxide is a comparatively new cosmetic material, there was no fund of knowledge resulting from experience with this material. Such standards as were extant had been developed chiefly for the paint industry. In arriving at a standard for cosmetic grade titanium dioxide, it became necessary to develop analytical methods to determine such specifications as water soluble matter and acid soluble matter. Our preliminary experimental work indicated that our methods would have to be revised in many instances to take care of the colloidal nature of some samples of titanium dioxide. Standard samples had to be obtained and distributed so that the experimental work done in the various laboratories would be comparable.

Having established the methods of analysis it then becomes necessary to analyze different lots of titanium dioxide to establish limits for the various specifications. In developing a standard many analyses are made for impurities which are found not to exist in the material under consideration or to exist in such minute amounts as to be unimportant. A final standard for titanium dioxide has been completed and is now in the hands of members for their criticisms. It is expected that it will be issued the latter part of this month.

Suggestions for Substitutes

The wartime dislocation of commerce has resulted in limited supplies of some materials, others, such as alcohol, glycerin and castor oil are required for war purposes, and their use has been severly limited or entirely eliminated. The scientific advisory committee has been able through its members' special knowledge and experimental research to make recommendations regarding the use of substitute or alternate materials. In order that you may have some knowledge of the magnitude of this work and the thoroughness with which it was done, I would like to point out that more than 120 substitutes or alternates for twenty-three raw materials have been considered by the committee. Among these are some thirty-odd for glycerin, fifteen for alcohol and twenty-three for castor oil.

The problem of substitute or alternate materials is in a constant state of flux. New ones are constantly appearing while old ones frequently disappear from the market. The study of alternate materials promises to be a continuing one until the usual raw materials are again available. Some of the substitutes will doubtless become the materials of choice because they will have been found to do the particular job better than the usual materials.

Containers and Closures

The container and closure problem has become more acute during the past year. Substitute closures have come very much to the fore. We have encouraged and cooperated with the manufacturers of substitute closures and I am sure our advice and counsel have been of assistance in the development of these closures. A rather complete survey of the field of closures was made and the results made available to you. This survey covers substitute closures in production and under development made of such widely diverse materials as plastics, paper, wood, glass, ceramics, and cork. Sizes, style, colors, type, availability, volume of production and limitations of the closures were covered in the survey.

This important work is being continued and we endeavor to keep our information up to date. May we urge that you make increased use of your board of standards for information concerning substitute or alternate raw materials and closures, or any of your raw material or packaging problems.

May I at this time thank all of those who have contributed to this work, and particularly do I wish to thank those untiring gentlemen of the scientific ad-

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visory committee who have worked so hard and effectively for the benefit of the industry as a whole.

I should like to leave with you two recommendations; the first I urge upon your immediate consideration, the second a goal to be achieved as soon as conditions permit. First, I suggest that a scientific section of the association be formed. There can be no question that science is becoming increasingly important in this industry. You are all aware, I am sure, that during times like these your technical staff is of the utmost importance to you.

Their value to you can be markedly increased by attending meetings of a scientific section where the program would consist of technical papers and discussion of special interest to this group. The value of, and the need for a scientific section is so obvious that I do not think more need be said other than I hope that this convention will recommend the formation of such a section.

Favors Research

Second:—I suggest that as soon as conditions permit, the association set up its own research laboratories. I believe that the inauguration of our own Research Institute will be as constructive a step as was the creation of the Board of Standards in 1937. Were our own research laboratories in existence now we would have found them of inestimable benefit to the whole industry in the study of alternate or substitute materials and closures.

Studies of the biological effect of the materials we use would naturally be investigated; penetration, absorption, topical effects, vitamins, hormones, to name but a few. It is not necessary that these laboratories be started on a grand scale, in fact, a very modest beginning is much more conducive to a desirable slow and healthy growth. I hope that you will keep this suggestion before you and adopt it at the earliest possible moment.

May I urge that you continue your research programs during this emergency, for it is through continued research that the products of this industry will remain available. I repeat—do not curtail your program but enlarge it if possible and cooperate with the board of standards in the growing program it has undertaken.

Legislation

Although most of the State legislatures have been in session, Hugo Mack, counsel for the association, told the meeting, that there had been only a few vexatious bills to oppose this year. One was, he said, in North Dakota which would require a separate registration of every cosmetic with a cost of $50 yearly to each manufacturer, and a Missouri bill which also had a registration feature.

The toilet goods industry, Mr. Mock said, has at all times taken the view that it will not only not oppose but will help promote any state legislation which parallels the Federal food, drug and cosmetic act. These registration bills of which I spoke constitute nuisance legislation, state tariffs so to speak, of no benefit to the State itself, but causing considerable expense and work to the individual cosmetic manufacturer. I am glad to say that both of these bills as far as their registration features are concerned, have been successfully opposed.

Dangerous Cosmetics

Considering the size of the industry, the past year, 1942, Mr. Mock said, has been singularly free from government actions against dangerous cosmetics. There was in 1942, he said, a continuation of actions against certain permanent waving units containing ammonium hydrogen sulphide but which actions, he said, were merely a continuation of actions begun in a previous year against the same product.

Coaltar Colors

There were two cases of the improper use of coaltar, he added, colors for application to eye lashes and eye brows, Mr. Mock explained, a practice which has been under the continuous condemnation of the Toilet Goods Association as well as of the government. This is a tribute, he said, to the vigilance of the Food and Drug Administration as well as, he said, to the cooperation of the board of standards with the government in these matters.

Grade Labeling

Mr. Mock was of the opinion that grade labeling was not applicable to the toilet goods industry. In discussing his stand, he said, in part:—

I do not see how grade labeling is applicable to this industry. You scarcely can adopt grade labeling for perfumes or toilet water of for most of the products of this industry. As a matter of fact I think the fears engendered by the thought of grade labeling have been unnecessarily exaggerated. Like the Frenchman in Moliere's play who suddenly discovered that he had been talking prose all his life, we already have grade labeling in many industries although we haven't called it that, If you buy a package of sodium bicarbonate in the drug store and it is marked USP, that is grade labeling. The sterling mark on silverware is another grade label. The wool labeling act is a grade labeling act and I think has proven generally beneficial to the people who buy clothing.

Canada Has Grade Labeling

I am informed that Canada has had grade labeling for many years and trade marks there have not suffered thereby. I have such faith in trademarks as a necessary part of the American system of merchandising that I do not share these fears about the effect of grade labeling.

Trademark Defined

Let us consider what is a trademark anyway? It is nothing but a ready means of identification which is as natural to our economy as the use of electricity. Well-known names are nothing but trademarks whether it be Tiffany, Ford, Roosevelt, or MacArthur.

The government may choose to limit your supplies and raw materials more drastically than it has done, but I for one do not think it is going to abolish your trademarks and I think trademarks are as necessary and inevitable in the American scheme and in the American economy as the right to private enterprise in itself.

Indiscriminate Grade Labeling

In all fairness, although I do not fear grade labeling, one fundamental opposition to grade labeling must be mentioned. You will recall when the original food and drug law was passed, every manufacturer including all manufacturers of inferior merchandise stamped their goods with the approval of the government, "Guaranteed under the Food and Drug Act of 1906," with the result that when people saw that stamp, they thought it was a government guarantee. The use of indiscriminate grade labeling would lead to similar misleading of the public which would be led in many instances to the belief that the grade labeling was a definite government guarantee of quality which it is not.

Fair Trade Prices

In the presence of a merchandise shortage and a seller's market, indiscriminate price cutting is naturally of rare occurrence and, therefore, the fair trade laws which normally act as a valve in the distributive process are not quite the necessity that they are to the national advertiser in normal times.

In the case of *Schreier* v. *Siegel*, decided by the Appellate Division, New York, October, 1942, and in the case of *Williams* v. *Yasner*, decided by Judge Nul, it was held that a general maximum price regulation did not justify violation of the fair trade law so that the practical result of these decisions is to prevent the former price cutter from handling the article at all.

His remedy is to apply to the OPA for permission to sell at the regularly accepted fair trade price at a normal ceiling price for the article in his territory, and I understand that this permission will usually be granted. To the contrary in a case in New Jersey which I understand is on appeal and the appeal has not yet been decided.

Tying Agreements

In this connection in this seller's market, the problem has come up whether or not toilet goods manufacturers are within their legal rights in asking their customers to buy an item which is rare on account of the scarcity of raw materials, another item which is a slower seller but of which there is an abundant supply.

For instance, can a toilet goods manufacturer insist that a customer shall buy one gross of lipsticks with every two dozen bottles of toilet water? The answer is as a naked legal proposition at the present time, subject to certain limitations and exceptions, such an arbitrary condition may be imposed pro-

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vided no general restraint of trade or tendency to monopoly may be proven.

There is nothing in the Clayton act or in the maximum price regulations itself which will prevent a manufacturer from requiring a customer to buy a piano, if I may use an extreme case, with every dozen bottles of perfume. I do want to point out that this is not a very sane process for a number of reasons:—

1. This is one way not to conserve the good will of the customer.

2. A combination sale of this kind must be uniform to all customers in order that the Robinson-Patman act be not violated. You cannot require a customer to buy extra merchandise in one case to secure what may be mentioned as rarer merchandise unless the same conditions are given all customers competitive in the same area.

3. Not only must you remember the Robinson-Patman act, but you also must bear in mind the general maximum price regulation, because such a combination deal may be in many instances a violation of the normal ceiling price.

4. I have said that there is no part of the Clayton act or of the general maximum price regulation which specifically forbids this practice. On the other hand, although the OPA has not issued any general order with reference to sales of one product conditional on the purchase of another, the general attitude appears to be against such practices.

For instance, some wholesalers were compelling retail stores to buy Western eggs rather than local eggs, in order to obtain meat and butter.

As a result, many stores discontinued the purchase of local eggs and retail stores were compelled naturally to adopt the same practice with their customers. Some retailers, for instance, required the purchase of half a dozen Western eggs with every one-quarter pound of butter. I can say that the above practices have been declared unlawful by the legal department of OPA and there are specific regulations against such tying agreements in the field of dairy products and meats.

Similar regulations prohibit such tying agreements in the fields of tires and tubes, iron and steel scrap, and other products, although there is no specific prohibition against tying agreements in general such as above mentioned, in the General Maximum Price Regulation. As far as I know, in every instance where such an agreement was submitted to the OPA for interpretation, such agreements have been considered unlawful. In my opinion, it would be inviting additional unwelcome and specific regulations for this industry if the practice of making such forced combination deals spread in this industry.

Choosing Customers

In connection with the same situation have manufacturers a right to stop selling any old customer? Can they arbitarily refuse to sell any new customer? Can they for instance cease selling to drug stores and sell only to department stores and the like? The manufacturer's right to choose his customers has not been abrogated, and of course as long as the market remains a seller's market you will be subjected to all kinds of pressure varying from the politest kind of solicitation and entertainment to the opposite pole of threats or litigation in order to fill the demands of customers and would be customers.

You still have the right to choose your customers, whether to sell them or not, and you have the right to choose the quantities of products you may sell them giving due consideration to the factors already mentioned which include the OPA and the Robinson-Patman act. Good business will dictate the conservation of your good will not only for the duration but thereafter and for this purpose you are free to act as you please.

Conservation Problems

Dr. E. C. Merrill, of the United Drug Company. Boston, in discussing "Conservation Problems in the Toilet Goods Industry," said:—

The purpose of this paper is to discuss come of our major problems especially in the field of raw materials, and what is being done to solve them insofar as this industry is concerned.

It is not news to state that your problems are more numerous than many other industries, and that this industry has felt a greater severity of limitation under war production orders.

I want to emphasize the fact that the Association of The Toilet Goods Industry has maintained a policy of close cooperation with the War Production Board, of avoidance as for as possible of the use of critical materials.

This policy has naturally imposed many additional problems of conservation upon its members and has been the subject of numerous discussions by the members of the technical advisory group of this association at their regular meetings. Beyond this has been involved a constant research by your technical group to find suitable alternate materials, to evalute their characteristics and determine their availability.

WPB M Orders

And so we will discuss one of the larger problems that was created by M-30 and supplementary orders relating to ethyl alcohol. With the curtailment imposed by this order, it became apparent that in order to approach normal volume production either a reduction of alcoholic content in proportion to the limitation of the order or a partial replacement by alternate material would appear one of the first problems to be solved.

In this connection it may be pointed out that of these items belonging to the toilet goods industry and using alcohol may be mentioned the after shave lotions, the toilet waters, the colognes, hair tonics, and hydroalcoholic products with essential oils including bay rum and mouth washes, excepting, however, the rubbing alcohols which while representing a large proportion of the usage of alcohol for external products do not appear to be manufactured or handled by members of the industry with a few limited exceptions.

In numerous instances of the shaving lotion class may be found a fairly wide variation in alcoholic content among various types found in the open market, and while it is true that certain types require a higher alcoholic strength under their existing formulation, the question might be well asked at this time, "What amount of alcohol is necessary for a satisfactory after shaving lotion?"

The problems of reformulation of an existing product upon which much good will has been built in one of considerable responsibility for the individual manufacturer and yet one that must be solved in many instances if it is desired to maintain volume.

It is the opinion of the writer that reduction in alcoholic content of numerous after-shave lotions can be accomplished by some modification in formulation.

The same holds true as well in the case of the toilet waters which similarly may require some changes in the balance of the formulation to remain clear and not show separation when chilled.

Solvent Materials

Of the alternate possibilities there appears to be the consideration of other solvent materials, such as, isopropyl alcohol, propyleneglycol and proprietary solvents including the sulphonated oils, etc., which in combination may work to a more advantageous degree than one solvent by itself. Such cases must necessarily be checked on the results obtained experimentally in individual cases.

While isopropyl alcohol holds some promise of relief, in many cases where reduction of alcohol may be in order, the handicap of odor appears to be an obstacle that is difficult to entirely overcome, especially in the higher concentrations.

That the industry has already in many cases realized this problem and put into effect numerous changes looking to a reduction in alcoholic content is already apparent.

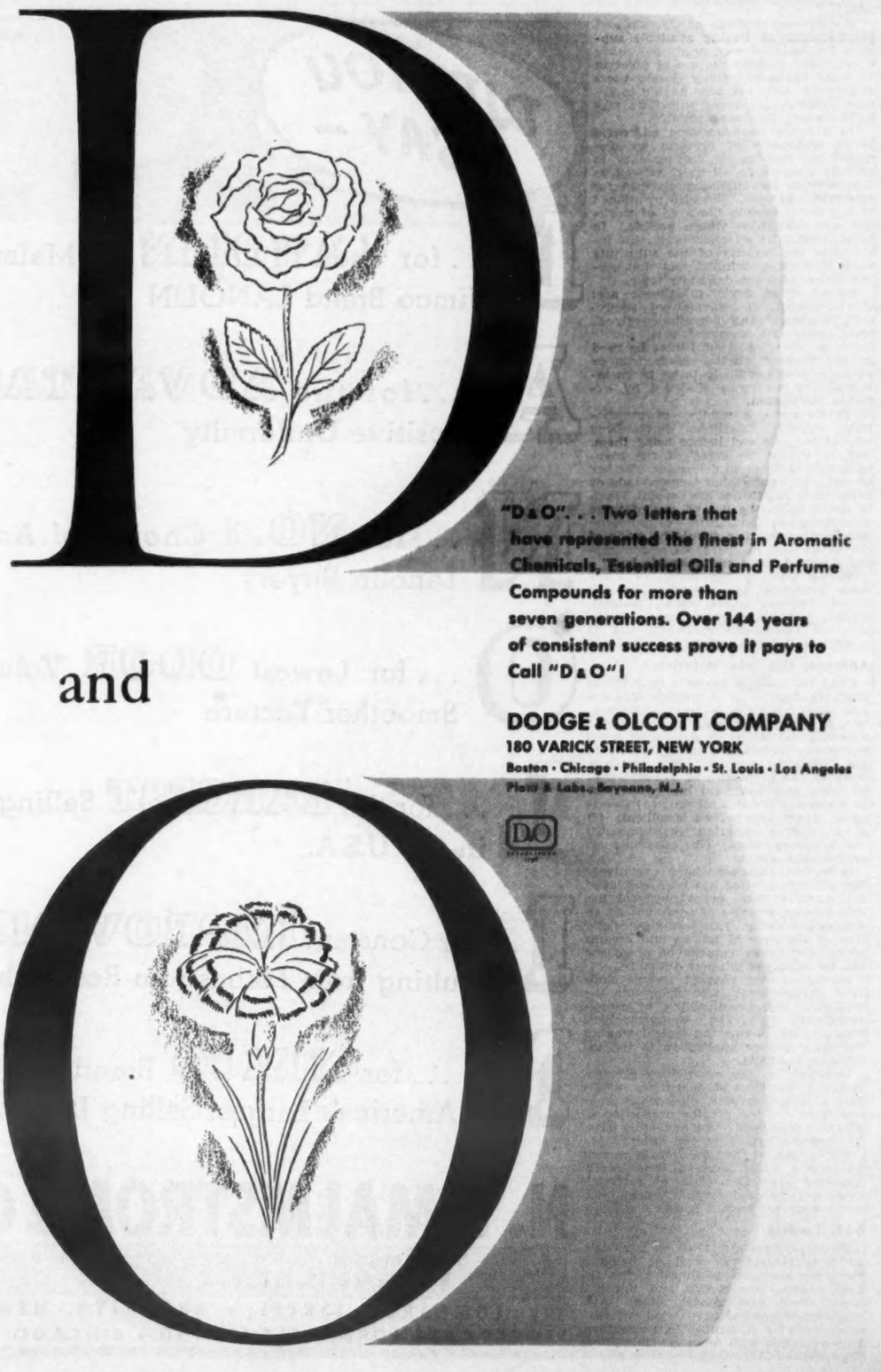
Propyleneglycol

Similarly propyleneglycol by reason of its solvent characteristics for numerous essential oils has been found useful, although somewhat more expensive and difficult to obtain than isopropyl alcohol.

In the field of mouth washes containing alcohol, the class of alternate materials becomes limited to such possibilities as propyleneglycol, which by reason of accelerating demand becomes limited in availability.

In the case of bayrums, the reduction in alcoholic content is entirely practicable and permissible within the requirements of the Bureau of Internal Revenue. It is to be noted, however, that the solubility of oil of bay begins to take a sharp drop after the alcoholic content falls below 50 percent alcohol by volume.

At this time, mention may be made of the fact that through recommendations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by the Toilet Goods Association, a modification of number forty specially denatured alcohol was issued known as number 40-A alcohol. This was a step in the interest of conservation of brucine, an ingredient contained in the number 40 alcohol.

Glycerin

As a result of order M-58, the industry became faced with a still broader problem affecting many products using glycerin. This has become a problem of major importance and of grave concern to the industry by reason of the fact that in some cases a satisfactory alternate material cannot be found.

Through the efforts of the national advisory group of the association a survey was made of all possible alternate or substitute materials for glycerin. Included have been listed certain materials of a proprietary nature whose exact composition has not been disclosed.

It goes without saying that such products are reasonably open to question by the reputable manufacturer, especially in the light of the Food, Drug and Cosmetic Administration's attitude toward certain of the ethylene type of glycols. This emphasizes the desirability of having the chemical identity of such products completely revealed by the manufacturer.

We quote herewith letter from the United States Department of Agriculture Food Distribution Administration dated April 6, 1943, to all consumers of glycerin:

"The present shortage of glycerin and the necessity of issuing available supplies for essential war needs has made it necessary to deny the use of glycerin in many instances. Many former users of glycerin, who are now unable to secure supplies, are using substitute materials where they are available.

"In a recent memorandum addressed to all consumers of glycerin we discussed the reasons for our inability to allocate glycerin to all uses, as well as the methods for obtaining glycerin for approved end uses. We also mentioned in this memorandum the need of working out substitutes where posible. In using substitutes all consumers must investigate the toxicity of the substitute since it is an established fact that certain substitutes are definitely toxic.

Among these toxic substitutes are: ethyleneglycol, diethyleneglycol (diglycol), 'Carbitol,' and polyethyleneglycol, and under no circumstances should these or other toxic substitutes be used in any product whether food, drug or cosmetic which is likely to be taken internally or otherwise absorbed by external application.

"Furthermore, a number of proprietary glycerin substitutes have been offered for sale and before using them, inquiry should be made of the manufacturer in order to determine whether or not any of the above compounds or other toxic substitutes are present. When in doubt as to the use of any of these substitutes in food, drug, or cosmetic perparations, inquiry should be made of the authorities in charge of administering the food, drug and cosmetic law."

Among some of the suggested alternate materials for glycerin may be found glucose, invert sugar, sorbitol, sodium lactate, propylene glycol stearate, 1-5 pentamethyleneglycol, and 2-methyl, 2, 4, pentanediol.

Alternate Glycerin Materials

Since the usage of glycerin in different products depends to a considerable degree upon certain of its physical properties, it would seem well in considering alternate materials to determine what particular factors are most desired in the individual product. For instance, some of the properties of glycerin may be listed as follows: (a) humectant; (b) as a vehicle; (c) as a solvent; (d) sweetening agent; (e) as an emollient; (f) as a reactive material; (g) lubricant; (h) softening agent; (i) penetrant; (j) antifreezing agent.

In certain instances where a relatively low glycerin content has been employed for emollient use, propyleneglycol has shown some promise of usefulnes as an alternate material. This seems especially true in the case of lotions and creams where the lower content of propylene can be employed without difficulty.

In the case of shaving creams similarly experimentation to determine the suitability and practicability of propyleneglycol, lanolin, propyleneglycol stearate, etc., seems the logical way to find their proper application to the individual products.

Included in the restricting glycerin order is that class of dentifrices, toothpastes, dental creams, etc., which represent by far the greater proportion of glycerin consumed than any other class of products named in the order.

Containing, as they do, from 20 percent by weight up of glycerin, it is readily apparent that this class of materials must run into substantial figures on a nationwide production basis.

Soda Lactate

Since glycerin functions as a vehicle, as a humectant, as well as being a flavoring agent in toothpastes, the invert sugars, corn syrup and the like were given first consideration. Also propyleneglycol has been tried out with some promise if limited in percentage, and combined with other possible alternates, such as, the sugars.

Sodium lactate appears to have shown some promise in certain saponaceous types of tooth pastes where appropriate covering flavors can be employed to counteract the characteristic sodium lactate flavor.

Those who are familiar with the necessary experimentation so desirable in arriving at the proper balanced formulation of toothpastes can appreciate the amount of detailed work necessary in considering such changes. And so we have in the field of glycerin replacement of a host of individual formulation problems to solve or the alternative course of suspension of production.

At this time it is hoped that something may develop from the more recent conferences by the Advisory Committee of the Dentifrice Industry that may eventually provide relief in this direction.

Vegetable Oils and Fats

Tied in closely with the glycerin limitation order is the subsequent action taken in reference to numerous glycerin containing fatty oils, such as we see in the orders that have appeared in the early part of 1943.

Such orders in part have aimed at the conservation of glycerin in certain oils ordinarily employed in the preparation of soaps or subjected to saponification processes while other oils have been restricted from viewpoint of the food utility or other specialized usage.

And so we have restricted use of castor oil, of cocoanut oil, of palmkernel oil, high lauric and numerous oils heretofore mentioned in M-Orders, but more recently covered by orders of the Office of Food Distribution. Among these may be mentioned:—

FDO Orders

FDO 29 allocating cottonseed, peanut, soybean and corn oil.

FDO-32 superseding M-235 castor oil and limiting delivery to specifically authorized uses.

FDO-33 replacing W.P.B. M-193 concerning mandatory standards for glycerin recovery.

FDO-34 superseding M-58 limiting deliveries of glycerin.

FDO-42 replacing W.P.B. M-71 Fats and Oils Limitation.

FDO-43 replacing W.P.B. M-60 governing the glycerin recovery from cocoanut, babasu palm kernel and other high lauric acid oils.

Fatty Acids

With the limitations imposed upon such oils as are commonly used in shampoos, i.e., cocoanut, palm kernel, etc., it became in order to find certain suitable alternate materials such as the fatty acids derived from the oils after the glycerin had been split off by saponification and subsequently refined. Such usage of fatty acids has been found entirely practicable in numerous cases.

Castor Oil

With the existing restrictions on castor oil as used in cosmetic products, a real problem of finding satisfactory alternate materials has become apparent. Suggestions have developed the possibilities that might be found in the broad class of hydrogenated fatty oils, such as, peanut, cottonseed and sunflower seed oils as possible practical solvents for bromo acid. Similarly, in the field of hair preparations neatsfoot and similar oils have been suggested.

Due to the unusual alcohol solubility of castor oil, it is evident that in the case of alternate considered in the field of alcoholic solution of castor oil, considerable reformulation would be in order to even approach a satisfactory replacement in this type of product.

In the foregoing we see a host of problems for the individual manufacturer—many of which have been completely solved, and others still pending further laboratory testing and observation.

It will be noted, however, that except for the case of alcohol, glycerin and the fatty oils that have more recently come within limiting orders that the use of critical materials by the industry is limited to a relatively small number of raw materials.

Search for Alternates

This does not, however, mean that the problems of conservation and the search for alternates end here. We all

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know of many problems that still exist due to shortages of non-critical materials. In the field of essential oils, for instance, the search for satisfactory alternates becomes increasingly necessary with the tendency toward the usage of the active component principles of such oils where found practicable, such as, we find in the linalyl esters for oil lavender and cinnamic aldehyde for oil cinnamon, etc.

Tragacanth Gum

The shortage of tragacanth has impelled reformulation problems not only in the field of cosmetics but also in the pharmaceutical industry.

Quince Seed

Similarly, the shortage of quince seed has led to a search for other substitute materials.

Cellulose Esters

In this connection may be noted the fact that such synthetic materials as the cellulose esters, methyl and ethyl, have rapidly gained favor in certain external products, such as emulsions and creams.

Choice of Cosmetic Materials

"Pharmacological Considerations in the Choice of Cosmetic Materials," was the title of a paper presented by Dr. O. S. Gibbs, of Plough, Inc., Memphis, Tenn., who pointed out some of the many functions of the skin and its appendages, such as hair and nails, including very importantly those of attraction and advertising. Dr. Gibbs went on to show how these were all an intimate part of the general function of the body and subject to the same general controls. Dr. Gibbs explained that the roots of the use of cosmetics lie in a knowledge of physiological function, and related how this may be modified by pharmacological agents. He was of the opinion that there is no fundamental difference between the scientific use of cosmetics and that of any other drug or medicinal agents, and that this field is merely a few pages taken from the same book of science.

The importance of functional knowledge was stressed by Dr. Gibbs, in relation to the ability of the tissues to withstand strains. He deplored the idea that ugly callouses or burnt and defaced skin were necessary concomitants of proper use. He was of the belief that such changes were the consequence of careless or ignorant handling, or abuse. Dr. Gibbs explained that the intelligent application of cosmetic materials may play a most important part in reducing the effects of physical strains.

Hair Dyes

Dr. Gibbs said that materials which have been especially troublesome to all concerned have been hair dyes and nail lacquers. Dyeing, even under simple conditions, he said, requires knowledge and skill. The dyeing of tissue still connected to its living roots, embedded in its living tissue, involves, he said, still further difficulties.

Moreover, black dyes are at best treacherous compounds, tending to produce unhappy often, it would seem, with human hair, involving most peculiar shades of green, he added.

To make matters still more difficult, Dr. Gibbs said, that the most reliable compound for this purpose is paraphenylenediamine, to which certain people, he said, exhibit a quite remarkable intolerance. This is not surprising, Dr. Gibbs said, for the compound is a very active and dangerous one under certain conditions. Consequently, he said, a good deal of unfavorable attention has been focused on this subject. Nevertheless, he added, with the proper understanding of the situation, there is no need whatever to deny the public the benefits of a satisfactory preparation, providing the dangers are properly evaluated, and suitable guards erected. Dr. Gibbs explained that only a certain proportion of persons are susceptible, and they may be readily tested before damage is occasioned.

Nail Lacquers

Nail lacquers, Dr. Gibbs said, have in common with hair dyes a relatively long tenure of action. Consequently, he said, if they contain materials irritating to the living tissue, or detrimental to the nail, these facts may quite readily materialize. Certain plastics of the urea-formaldehyde type, Dr. Gibbs explained, while apparently harmless to the nail, not infrequently form contact-dermatitis on those parts of the body in which contact occurs. Often, as a result of a sleeping habit.

Such information, Dr. Gibbs said, should be most carefully collected, and estimated on a relative basis. If an undue frequency of cases occur, Dr. Gibbs said, oftener than 1:10,000, the material is possibly unsatisfactory from a pharmacological standpoint. If over 1:1000,000, Dr. Gibbs said that it seems rather beyond practical importance, except as falling into a general warning against such matters.

Pantothenic Acid

The pigment in the hair, Dr. Gibbs explained, has become a subject for intense interest recently because of the discovery of the so-called anti-gray hair factors. He said that he tried pantothenic acid administrations on a number of people with quite negative results in this particular direction. Para-amino-benzoic acid, he said, is another factor perhaps involved, but he was inclined rather to the belief that neither of these is the direct factor for which people are searching.

Any mechanism in the body, Dr. Gibbs explained, is a balanced, or, perhaps he said that he should more correctly say, a stabilized point amidst a number of functions. Thus, he added, it is possible to obtain changes by a number of different methods, some, he said, would be absolutely opposite in a pharmacological sense.

However, Dr. Gibbs said that usually there is a certain mechanism by which constant effects are producible, and, until this is found, he added, one is never satisfied with percentage results only. That pantothenic acid or para-amino-benzoic acid, or a mixture of both, Dr. Gibbs said, may effect a change of color of hair seems already demonstrated, but, he added, the number of positives is still too low to be convincing that the chief control has been discovered.

WPB Activities

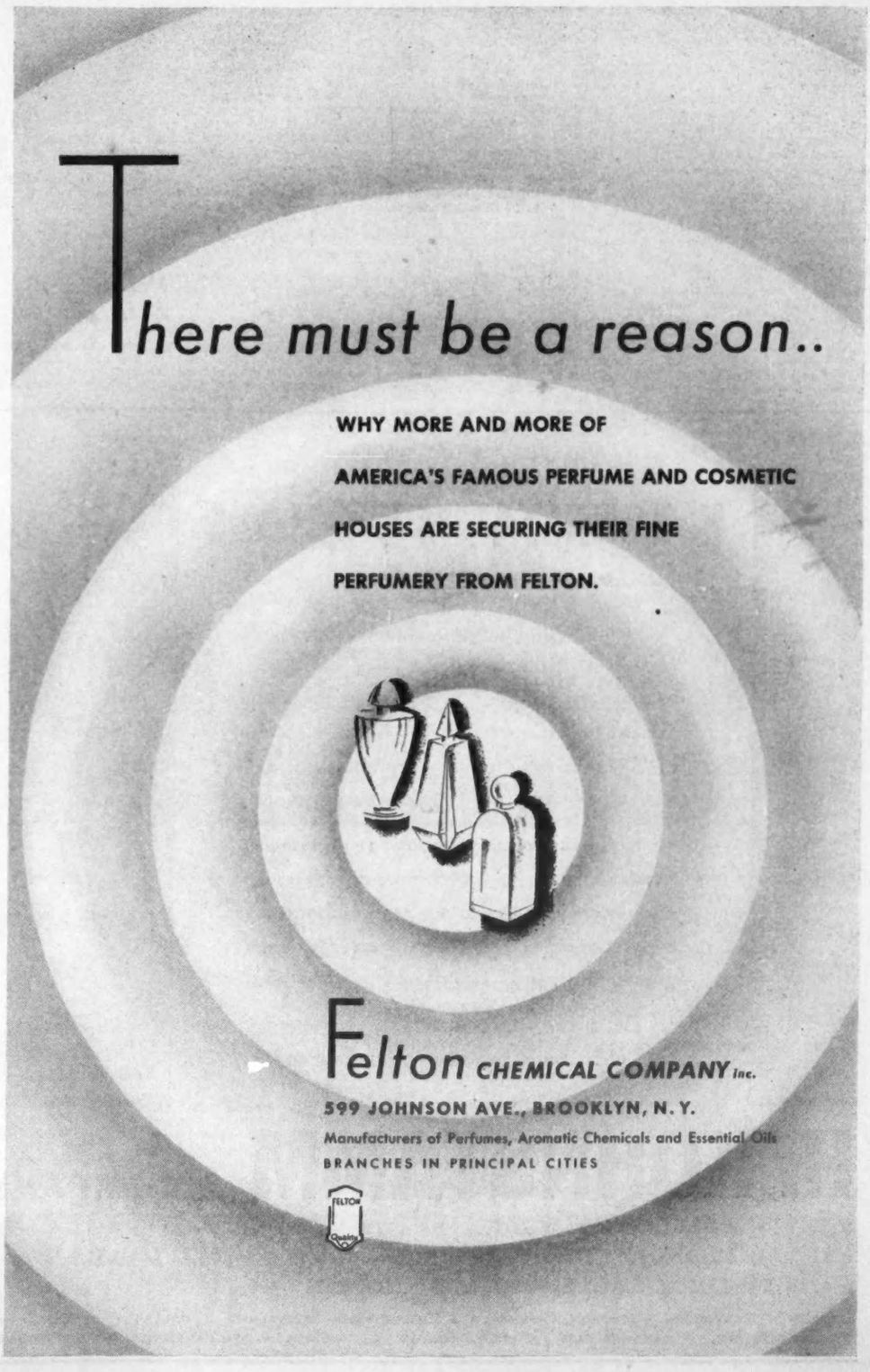
C. A. Willard, deputy chief of the drugs and cosmetic section of the chemicals branch of the War Production Board, in reviewing the activities of the past year said that any reflection first brings to one's mind the cosmetic order, L-171. At the time this order was written Mr. Willard said, it was recognized that a horizontal cut in production would bring inequalities. The order at the time of its inception, he said, was contemplated as nothing more than a stop-gap, until such time as we could devise adequate and equitable control of critical materials.

WPB Order L-171

When early in October such a plan had been worked out, M orders, controlling use of critical materials, had in most instances, Mr. Willard explained, caught up with restrictions of order L-171, that is, he said, restrictions on an ingredient equalled or exceeded the L-171 limitation on an end-product of which the ingredient was a part. It then was our opinion, he said, that control of individual critical materials adequately conserved war materials without having a separate order specifying limited use of materials in toiletries and cosmetics. At the same time, Mr. Willard said that it was believed that continued or additional restrictions on use of sizes, odors and colors would place a burden upon the industry out of proportion to any possible conservation of materials, transportation and labor.

Glycerin Allocation

The various M orders controlling materials have made the problems of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the manufacturer increasingly difficult as use of materials has been further restricted to meet war demands, Mr. Willard said. Principal in quantity and overall importance, among materials so restricted, he said, are glycerin, alcohol and castor oil.

Glycerin allocations, Mr. Willard said, have been denied the cosmetic industry. However, under the order a small use exemption permits use of 1,150 pounds of glycerin per month, provided this quantity is not in excess of 70 percent of base period use. This action, he said, has had a most serious effect on certain branches of the industry more particularly because substitutes for glycerin are also critical and insufficient to meet all of the essential requirements. Mr. Willard further said:—

Glycerin Substitutes

We are now engaged in study of availability and compatibility of most satisfactory glycerin substitutes. This study will accomplish two objectives. It will determine toiletry and cosmetic position in ladder of essentiality of all end uses not directly military and it will set up an industry quota of these substitutes.

Any such quota however will be more theoretical than actual as it will be subject to change as military requirements change. Nevertheless, with this quota as a guide it is expected some greater degree of stability will be possible than by attempting to evaluate essentiality anew each month.

Substitutes have been found for many of the uses of castor oil. While not as good, they will answer the purpose during the emergency when other requirements for castor oil are far more important than any use in toiletries and cosmetics.

There is no substitute for alcohol as used in most, if not all, cosmetic products. As to alcohol situation, I see no immediate additional cut for cosmetic use nor do I believe greater quantities will be available.

Isopropyl Alcohol

Isopropyl alcohol is less critical and can be substituted when odor can be masked. There are continual false rumors as to availability of alcohol for this industry. In one week recently I had to deny four reports from industry that the alcohol quota would be increased and just as many reports from manufacturers that the quota would be substantially decreased.

If rumors had been consistent, it very reasonably could have been a case of fire where there was smoke. The inconsistency indicates some carelessness, if not willingness on the part of some manufacturers to allow their imagination or hopes to get the better of their judgment.

We will continue, in fact we will be eager to, deny reports without basis of fact. All industry has difficulty enough making readjustments to meet war economy without making unnecessary false starts.

Nitrocellulose

Nitrocellulose used in nail lacquers has been very critical. Without any substitute for this ingredient, production of this end product has been curtailed. We were able to find some reclaimed materials from which nail lacquer base could be made. This assisted manufacturers of this product for a short period. In the meantime, I am happy to say that the nitrocellulose situation has eased to some extent and last month allocations were made on the basis of proportionate 1942 use.

Dyestuffs, Pigments Order

The dyestuffs and organic pigments order limiting the use of certified dyes to 60 percent of 1941 has not seriously restricted production of such items as nail lacquers and lipsticks. This order did not freeze inventories; therefore, many manufacturers have avoided difficulty by using inventories along with 60 percent allowed under the order. It is possible that in time restrictions of this order may be eased to some extent. In the meantime, any manufacturer without inventory may appeal for relief under the order.

Steatite Talc

The steatite talc order is one of the indications of flexibility of material limitation orders. When it was found that supplies of this material were ample for military needs, the restriction affecting the use of steatite talc by this industry was lifted.

Wetting Agents

Wetting agents are extremely tight and it is likely that they will continue critical. All possible substitution of non-critical material should be developed.

A week ago, when this talk was first prepared, I was ready to advise you of impending scarcity of urea resins for cosmetic closures with the suggestion that you confine their use to closures for products containing alcohol.

Formaldehyde for Closures

Subsequently formaldehyde has been denied in May allocations for urea resins for all cosmetic closures. In June conditions may improve to some extent. As yet, however, no assurance of future allowance can be given. The other critical component of these resins is urea. It has been available for May but may be cut off in June. One or the other of these materials may therefore be reason for future denial of this type of closure.

Phenolic Resins

Immediate substitution must be made. It is recognized that there are few substitutes for metal that will hold alcohols. Phenolic resins have been out for some time. Every effort is being made to provide some material for closures for products containing alcohol. In the meantime in placing any orders for urea closures with your molder you should specify thereon number to be used on alcoholic products. These may be available. If so and closures for other cosmetics are denied and you do not designate the perfume, hair tonic, hand lotion, etc., closures, your entire order may be denied.

Melamine Resins

As a possible substitute you should look into the melamine type of resins. These are sold under trade name "Melmac" by Calco Chemical Company, a division of American Cyanamid Company. The qualities of this material are not unlike those of phenolic resins but all molding equipment may not handle this material. At the moment melamine resins are available and free. It is not yet known if quantity is sufficient to replace all present use of urea.

In spite of these restrictions and their serious effect, I want to repeat the statement I made here a year ago that your industry is to be commended for its ingenuity, farsightedness and ability to keep ahead of restrictions. L-171 and all other restrictions and limitations did not prevent your industry as a whole from enjoying in 1942 the biggest year it has had in its history.

As to the future, no long range predictions can be made. In fact, no short range positive statements could be depended upon as conditions change rapidly. Demands of tomorrow cannot be accurately anticipated today. Yet, we have arrived at a point where plans can be made with some more confidence than in early days of the war. In general, this industry has travelled a long way in adjusting itself to war conditions.

We have passed the days of acute emergency when decisions had to be made quickly and when mistakes were more easily made. You as producers have now had time to learn which materials you use are important war materials. You continually seek to find and evaluate substitutes. Therefore, when denial of one comes you are prepared. I like to refer to this condition as a stabilization of transition period.

I do not infer that this industry is going to have an easy time, quite the contrary, the industry will find it more and more difficult to maintain its present rate of unit and pound sales.

It does not now seem likely that the industry will again have to contend with an order with horizontal production cut. Here again no long range prediction can be made. It is hoped that you will only be deprived of materials that are needed for more important use and not be limited on end product production.

I have had many members of your association state their willingness, if not eagerness, to graciously forego the use of any material important to the war effort although it may be very important in their product.

Product Limitation

Material limitation as opposed to product limitation can continue only so long as services required to produce and transport your products are available. The nature of your production work is such that you can use labor not needed in war industries. You should pay particular attention to use of transportation facilities. You recently have been asked to purchase raw materials from nearest source wherever possible.

Some manufacturers have been able to decentralize production to reduce haul to consumer market. You are now being asked to voluntarily reduce amounts of paper and paper board used to package and ship your products. You will hear more about this later in your program. These and other steps you can take may prevent drastic mandatory orders.

Several manufacturers have objected to secrecy imposed by the War Production Board on members of industry advisory committees and I believe others have harbored resentment. This secrecy cannot be fully justified. Opinion is divided within WPB and there are good arguments pro and con. Arguments of

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industry are reasonable and sound and offered in good faith.

Industry Advisers

Industry advisory committees in advising the War Production Board must know thinking and plans of WPB. In many instances it is not advisable that all industry and the public be alarmed unnecessarily when on so many occasions plans are changed if not dropped altogether. You may say committee members have an advantage. The advantage is there but they do not take it. I have presided over five committees and I have yet to know of any advantage taken by a member.

On the contrary, I can cite the toiletries and cosmetics committee and its work on proposed packaging order. Members of that committee after making recommendations which they expected would be approved, cancelled box orders which were later reinstated in conformity with recommended specifications, while at the same time other manufacturers were begging suppliers to produce elaborate boxes, using excessive quantities of paper, before the proposed order issued.

Publicity is often given through trade or daily papers rather than by word of mouth by committee members, thus assuring accuracy, more complete coverage and inclusion of all essential detail. Then it is at least semi official without the "I hear that" preface. As far as I am concerned this industry will be advised of actions and conditions affecting it as quickly as possible without interfering with the war effort.

Containers and Closures

Probably the greatest problem facing the industry today is the task of obtaining containers and closures, more particularly closures. I have already referred to urea resins and now refer to all types of closures. The situation is indeed acute. There are many industries, some of them considered more essential than cosmetics, that have been forced out of metal to the extent that demands for substitute materials far exceed the supply. This applies to wood and paper as well as plastics.

Ceramic Closures

While ceramic closures may be available in increasing quantities, it is felt that maximum production of these will not greatly relieve the situation. The Drugs and Cosmetics Section is making a study of this situation and it is hoped that some degree of relief may be forthcoming. I urge that all manufacturers use every effort at their command to find substitute material and even devise means of reusing closures.

There has been much confusion and misunderstanding of order L-103a, the glass container inventory order. I shall attempt to interpret it in simple terms. First, the restriction is on empty new containers. Any containers filled with a manufacturers product are exempt. The limitation is to two cars or next sixty days' requirements whichever is greater. You may have on hand several times two cars if not exceeding requirements for the next sixty days. This quantity restriction applies separately to each design and finish as defined in original Order L-103.

Design means shape, weight, size, capacity and contour of the body of such container. The restrictions therefore apply to each size. This order was written to prevent overstocking of glass containers of other types to the detriment of containers for commercial canning and therefore expires September 30, 1943, unless previously revoked or extended.

The War Production Board is not desirous of putting out of business any company or industry that can substitute non-critical materials for critical materials and at the same time not unduly burden transportation facilities or use manpower required for more direct war work or use any materials or services

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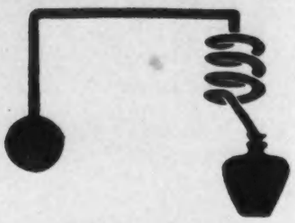

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that will interfere with the successful prosecution of the war effort. I am reminded of the French cosmetic manufacturer who stated that he had been required, because of shortage of material, to change formula of one product 140 times and that before he left France, face creams were made of clay and seaweed.

He, also, told me that face powder was very often purchased by consumer in her own paper bag or tea cup. This illustrates two points, first, women will go to extremes to obtain necessary and essential cosmetic preparations and secondly, manufacturers are ingenious enough to keep products on the market although each change makes their problem of maintaining high quality more difficult.

It is hoped that we may never reach the limitations now necessary on the Continent. But even as that point may be approached, the American manufacturers will face the problem with courage as well as conviction and the War Production Board will assist in every way possible to find non-critical materials.

Cosmetics for War Workers

Irene Stanley, of the *St. Louis Globe Democrat*, in discussing "How Women War Workers Have Influenced Cosmetic Trends," said, in part:—

To give you a more accurate picture of the importance of women in industry, and their influence on cosmetic trends, the annual cosmetic market would represent $1,200,000,000, if all women would spend as much for cosmetics as does the war-worker. This market was formerly estimated at only $500,000. According to War Manpower Labor figures, there are now 5,000,000 women employed in active war work and 16,000,000 women working in all. She said that the average woman worker was spending $2.37 a month on cosmetics.

Skin problem has arisen from their work, and they are eager for information on caring for their skins during working hours....This presents a most serious problem of finding a make-up, which will last all day, and which will give sufficient coverage to ward off dirt, oil and shellac. I believe you can thank the war-worker for the renewed popularity of rouge. Nail polish is being discarded by many because they could not keep it on in their present work. Hand preparations were in demand, as they were working with their hands which were fast showing scars of grime and oil. They were clamoring for a pound of cure, rather than exercising an ounce of prevention.

Price Regulation Discussed

John J. Toohy, of the Chemicals and Drugs Branch of the Office of Price Administration, discussed the various

John J. Toohy

phases of the new cosmetics price regulation No. 393 which will affect about 200 types of cosmetics with several thousand trade names.

Mr. Toohy said that the new regulation replaces the GMPR for packaged cosmetics. All prices, he said, established under the GMPR are carried into the regulation without change. Several sections of GMPR, he said, are included by reference.

Wartime Cosmetic Trends

A. C. Nielson, of the A. C. Nielson Company, marketing research, discussed the difference between sales problems and marketing problems. Using a series of charts among the subjects he touched on were trends of consumer income and retail sales; British retail sales; changing characteristics of the United States population; shifts in retail sales by market divisions; price ceilings and retail gross profit margins.

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Paper Boxes Simplification

W. E. Braithwaite, Division of Simplified Practice of the National Bureau of Standards, told the meeting that he had been informed that in normal times about 600,000 tons of paperboard are manufactured for all types of set-up boxes. He was of the belief that the tonnage in 1942 was approximately 550,000 tons. About 170,000 tons of board were used, directly or indirectly, for war purposes, leaving about 380,000 tons available for civilian supply. He therefore asked that the industry act favorably on the proposed simplification of paper boxes for toiletries and cosmetics. The proposed simplification recommends that a standard box to hold face or dusting powder be a full telescope box composed of a cover, a base, a drum or powder receptacle and a projecting bottom, constructed without hinges, extra heads, extra lids, padded tops or other extra features, and made from paperboard not to exceed the maximum calipers indicated in the following tables:—

Square or Oblong Boxes

	Maximum thickness of paperboard (inches)
Projecting bottom heads	0.050
Base or cover blanks or heads	.040
Drum blanks or heads	.085

Round or Oval Boxes

	Maximum thickness of paperboard — For boxes — Less than 3 in. diam.	but less than 4 in.	Over 4 in.	Bottom fill
Base or cover heads	0.035	0.050	0.050	0.080
Base and cover sidewalls	.035	.045	.050	....

	Maximum thickness of paperboard (inches)
Drum side walls—	
Under ½-inch in depth	0.040
More than ½-inch in depth	.085

It is recommended that snap-in bottom type may have one extra bottom head heavy enough to lock the crimp on the drum.

Alternative Recommendations

No square, oblong, round, or oval powder box shall contain more paperboard by weight than would be contained in a standard powder box of the same shape and cubic capacity.

No odd-shaped powder box shall contain more paperboard by weight than would be contained in a standard oblong box of the same cubic capacity.

Boxes may be either in individual folding cartons or in containers of not less than six boxes, but not in both.

Set Boxes

It is recommended that set boxes to contain two or more assorted items of toiletries or cosmetics be restricted in size and use, as follows:—

The inside square area shall not be more than 150 percent of the square area of the items packed, computed as follows:—

The length of the longest item multiplied by the minimum combined width of all items laid side by side (touching and flat) and faced up as they will lie in the box.

The outside depth of the box shall not be more than one inch deeper than the depth of the thickest item to be packed face up as it will lie in the box.

No box shall have more than one flat extension edge. (No built-up extension allowed.)

Folding boxes shall not be used on items packed in set boxes except as a protection for collapsible tubes.

Only one protective cover shall be used on any set box, and this shall not be a corrugated container unless the box with contents weighs more than ten pounds each.

Cologne Boxes

It is recommended that no box for packaging an individual bottle of perfume, toilet water or cologne shall be made with outside dimensions more than one inch longer, wider, or deeper than the bottle at its widest point in each dimension.

That no box shall be made with more than one flat projecting edge. (No built-up extension allowed.)

That no box shall have more than one protective cover.

Containers, Closures

The panel of experts on an "Information Please" on containers and closures was composed of the following:—Alfred F. Brady, of the Hazel-Atlas Glass Company; Franklin Conner, Colt's Patent Fire Arms Manufacturing Company; Richard M. Krause, of Richard M. Krause, Inc.; J. H. Patterson, F. N. Burt Company, Ltd.; Frederick Remington, Peerless Tube Company; L. R. Root, Scovill Manufacturing Company; C. H. Vanderlaan, of Vanderlaan Tile Company; and Karl Voss, of Karl Voss Corporation.

Among the questions asked by S. L. Mayham, executive secretary of the association, who acted as chairman, were:—

Chairman Mayham: Will blackplate be available for closures at any time during the next year? If not, might there be sufficient metal to produce the threads for wood, paper, and other substitute caps?

Mr. Root: Well, as far as blackplate is concerned, metal of any kind, from the best information I can get, is not going to be available. Now, all of you have heard that there is plate frozen here and there; but I think it is going to stay frozen, or, if they do release any of it, I think it will go into essential civilian use, and not for any use that we could hope to put it to in this association. So, from the best information that I can get, I don't think we can look forward to having any metal caps at any time soon.

Chairman Mayham: What about metal for threads?

Mr. Root: Well, I still cannot find anyone who can give any assurance that plate is going to be released for any non-essential use. On essential use they have given some slight relief, but I have talked to at least a dozen people in the past week, and they can't see any chance at all of plate being released to make a cap of any kind for a non-essential product.

Chairman Mayham: Have screw-type wood closures been developed in which the thread will not strip when subject to usual use? Can these closures be made alcohol proof and in what volume can they be turned out?

Mr. Root: Well, I hate to be such a gloomy fellow, but, on wood caps, you can make fairly good wood caps, but there isn't enough equipment in the United States to make anything like the number of caps that would be required for any one industry irrespective of a group of industries. The reason for that is that your wood cap has to be made on a high-speed automatic. The wood mills have never had any occasion before to put any vast amount of special equipment for the manufacture of threaded caps. Of course, today they can't buy any equipment; so there again you have a bottleneck.

In addition to that, virtually all the mills are running short of wood. This wood has to be aged for some time, and they haven't sufficient men to send out in the woods to cut it any more. After it is cut it ought to be aged at least three or four months to make a satisfactory cap.

So there you have a shortage of manpower in attempting to get the wood in; you have a drying period, and then you have the shortage of equipment on which to run it. I can tell you that there aren't any wood-turners that I know of that really care to run caps in any volume, because it slows up their production.

Paper Containers

Chairman Mayham: The shortage of metal has created a vast demand for paper containers for such things as dentifrices, talcum powder, etc. Can paper containers for these products be supplied in adequate quantity without the purchase of considerable amounts of new machinery?

Mr. Voss: No, I don't think so. Many of these substitute containers are, of course, different from the usual line of containers and packages made by box makers. It would require new machinery. Of course, many of these substitutes do not carry priorities—at least high enough priorities—with the result that it is almost impossible to get the machinery. I know that quite a number of concerns have been working on that sort of thing, and a number of them have done a very good job.

There are certain limitations when you are using cardboard, as compared with metal. Cost is an element, and the method of closure is another one. But to answer the question definitely:—it is very difficult to obtain the new machinery, even if you have the facilities otherwise for making the containers.

Adhesives

Chairman Mayham:—"We have recently had a little trouble with the adhesive quality of our labels. Are present adhesives as good as those used in the past and are there any new adhesives coming along that will help this problem?"

SUBSTITUTES FOR SUBSTITUTES

There was a time when life for the research chemist was comparatively simple. He'd create a new formula for grateful clients, or aid in bringing costs down by suggesting a change in basic ingredients. However, that was all — in what seems — the long ago.

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Not only are vital ingredients denied him — unavailable or price prohibitive — but the substitutes that he so painstakingly created to take their place, have themselves been placed on shortage or priority listings. Today, he must concentrate the full measure of his skill in the creation of *Substitutes for Substitutes.*

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ESSENTIAL OILS AROMATICS

Mr. Krause:—We had anticipated something like this for some time past, and I made a record here as to just what has happened, and I will read the letter from the glue manufacturer:—

"I is a well know fact that most of the better paste formulas are made from tapioca flour, which supply has been cut off by the war, having come from the South Sea Islands. There are many good substitutes for tapioca, such as cornstarch, dextrine, etc., but the trouble comes mostly from the inferior sizings the paper companies are using, as they are having their troubles in replacing casein and other standard sizing formulas that they have been in the custom of using.

It would take too long to go into a general discussion as to how all these troubles could be remedied, but would suggest, where real trouble arises, for the user to contact his paste supplier and feel confident in most cases many defects can be overcome, as with their vast experience they can tell whether it is the fault of the paper or if the paste has the right adhesive qualities."

Tin Tubes

Chairman Mayham:—"Can you tell us how the tin recovery program is working, and whether the percentage of tin being recovered is sufficient to warrant the continuation of the tube-for-tube exchange? When do you think the tube-for-tube exchange will have outlived its usefulness?"

Mr. Remington:—Since the formation of the Tin Salvage Institute there have been recovered over four million pounds of tin and other metals on tube-for-tube exchange basis. Of that the percentage of tin started with 91 percent last July. As of May 1 it is now 41 percent, and shows a declining curve. The entire collapsible tube industry hopes that such a restriction as the tube-for-tube exchange will be removed, and if we were asked to estimate when we think it will be possible to remove such a restriction we would say about nine months.

There are two other factors that may prevent the removal of the tube-for-tube exchange. One is that we are getting in large quantities of lead, which is useful to the collapsible tube industry, and the other condition is that the public having been educated to the tube-for-tube exchange may have it continued by government edict for psychological reasons.

Phenol and Urea Resins

Chairman Mayham:—"Is there any chance that supplies of either phenol resins or urea resins can be materially increased? Enough to take care of this industry?"

Mr. Conner:—Positively not, during this emergency. Very few of us realize the demands on those basic materials for Lend-Lease and the war requirements. It is very little appreciated by people in industry that our basic materials are the very basis of the explosives and the repellent materials that are absolutely necessary for our war effort. The production of formaldehyde and phenol has increased 300 percent since 1938. In order to take care of our civilian requirements, as well as Lend-Lease and our own direct war efforts, it would require at least a 100 percent increase over today's production.

Non-Critical Tubes

Chairman Mayham:—"We recently saw a British tube which apparently was made of fiber impregnated with some waterproofing substance. Have tubes of this kind, or other non-critical tubes, been developed in this country?"

Mr. Remington:—I hate to give applause to the competition of the collapsible metal tube industry, but there have been tubes developed, of plastic material. The answer as to whether they are satisfactory or not I would refer you to the customers of those particular tubes for we particularly think there is no suitable substitute for a metal collapsible tube, and except for the degree of essentiality, there is no shortage of collapsible metal tubes. The industry is working at 136 to 140 percent of last year, and some companies are producing as high as 200 percent of last year, restricted only by the available supply of manpower. We are not so blind as to think that there never will be developed a suitable substitute for metal, and every one of the fifteen collapsible tube manufacturing companies has done considerable research and made considerable study of the problem.

To date none of those metal tube manufacturing companies is in production on a tube other than metal.

Extenders for Resins

Chairman Mayham:—"Thermosetting plastics are said to have been developed from non-critical materials (sugar cane). Can these be used in available molding equipment, or as extenders for urea resins? If not, why not?"

Mr. Conner:—An extender of the existing resins, which is the basis of a molding compound, whether it is urea or phenol, which are the thermosetting compounds, is nothing more nor less than dilution. Now, you can go just so far in diluting everything before it loses the very characteristics for which it was originally intended. They are using sugar cane, coconut shells, woodflour, shirts, over-alls, and what-have-you, to extend our compounds. Most of the articles on our resins, on these materials, are either written by doctors or lawyers or someone who is trying to secure a position in the industry and has not yet succeeded.

We did, for a long time before this war, try to extend the materials; that is natural. We learned something about extension during "prohibition" days! It is the same thing exactly. There is nothing new about extenders.

A good many of you gentlemen in the audience are buying closures and packages made from extended materials. If you would accept them and stop complaining about them, we would extend the materials still further. But when your credits begin to almost equal your ability to pay us, I will say it is time to stop extending, and that is exactly what is happening. There is too much talk by too many people who don't know anything about the subject, bringing home to you folks an idea that by extending there will be lots of materials available. There just is nothing to it.

Thermoplastics AA-4

Chairman Mayham:—"We understand that the best rating which is being given thermoplastics for closures is probably AA-4. Will material be available on AA-4 rating, or does it need a higher rating to secure the material?"

Mr. Conner:—An AA-4 is simply leading you on. It is just a promise, and we cannot fulfil any such promise as that, no matter who gave it to us. Our general pattern in the plastics industry for closures and packages is 90 percent. AA-3, so when you are handed an AA-4 that is simply a return ticket back home, to keep quiet about it.

Just yesterday I was in a conference with some representatives from Washington. One gentleman who was talking authoritatively on the plastics situation had been in the shoe business before he went to Washington. The other gentleman who was talking authoritatively had been in the shirt business. Well, between the shirts and the shoes I can understand how they would know a lot about plastics, because those two gentlemen are exponents of the extender program. They know something about plastics, because it is a fact that the very basic materials to use in these closures or the resins that you make the closures from are used extensively for the tanning of leather. It is also used for the waterproofing of cloth, and used extensively for zipper work and buttons, if you please, and also for bleaching and when the fellow who makes those shirts dies, he gets seven quarts of embalming fluid, because that is one thing that the embalmer must use. Seven quarts of that are shoved into his body. You take it alive, as long as you live; and then you get it again when you die.

These basic materials have over 700 different applications. The fact of the matter is that you couldn't eat anything from a can, such as cheese, or beets, unless you had some basic materials, of the very plastics you are looking for, in there to preserve them. That is absolutely true. Then, again, you folks who dye your hair—you couldn't dye your hair without some of that basic material, nor could you have permanent waves without that. You could go on, and I could tell you for hours just what they do with these basic materials. But essentially there is just sufficient to go around for war and Lend-Lease and then what some people now have called the prime essentials for consumer products, civilian uses.

Lead Tubes

Chairman Mayham:—"Have materials been developed for coating the interior of lead tubes that will satisfactorily protect the material packaged therein? How effective are these coatings under conditions of consumer use?"

Mr. Remington:—I want to say that the collapsible tube industry is using lead. There is no secret about that, because everyone who buys collapsible tubes knows that that is so. The only tin tubes available are for pharmaceuticals, and those tubes are only obtainable on high priorities, from any manufacturer. Tin-coated lead tubes are available, to a limited extent, for certain other pharmaceuticals, all of which

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in her doctor's prescription...or her favorite toothpaste

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are classified in order M-115. The rest of the tube products, which include practically all of the toothpastes and shaving creams, are either now using lead with suitable liners or will be within the next two or three months.

The toothpaste people have what I should term a temporary order permitting the use of 3 percent tin-coated.

Now, bringing up the subject of liners simply means that the responsibility for the liner is upon our customers. We have developed, as an industry, about 12 or 15 suitable useful wax compounds.

In addition to that, we have developed several extremely efficient lacquers and combinations of lacquers. Some of the lacquers have been adopted by the Army Medical Corps as being a suitable liner for some pharmaceutical ointments.

The individual tests of products manufacturers indicate that these lacquers or waxes seem to be suitable for most of their products, but not all. There is no such thing as an all-purpose liner, so far as we have been able yet to discover, and there is no such thing as just one wax doing the job for every product, or one lacquer.

If you had the research facilities to prove to your own satisfaction that the liners that we put in lead tubes are satisfactory to you, then that is the very best that we can possibly do.

You must remember that ever since collapsible tubes have been presented to the public, we, the tube manufacturers, have never known what goes into your products; and, furthermore, we don't know that even today. Therefore, we cannot accept any responsibility. The only thing we can do is to submit samples for your tests, and if those tests work out all right, and you think the material submitted is suitable for public use—and if you can then get the tubes from the tube manufacturer—I should say that you might as well go ahead.

When I say "properly taken care of," I mean that it has been taken care of on what the government has chosen to set as a standard, namely, the 1940 output. Most users have gotten more than the 1940 output; they have gotten at least 1941, and are now even getting the rate of their 1942.

—O-P-D—

Atlanta Drug Club Re-Elects Officers

At a recent meeting of the one-year-old Atlanta Drug and Chemical Club, the following officers were re-elected:—President, George R. Fellows; vice-president, L. W. Robinson; secretary, R. D. Rainey; treasurer, A. W. Duke; chairman of board, Fred A. Lewis.

Cosmetic Pricing Regulation

—Continued from page 57

to be unlikely because of the industry's large investment in consumer goodwill for its products.

A special formula is given for pricing Christmas sets of cosmetics.

Consumers will know the maximum retail price of a new or changed packaged cosmetic since the maximum retail or professional prices must be marked on packages by manufacturers where they determine resellers' prices, except that in the case of gifts they may be marked on detachable cards or labels.

Definitions

"Cosmetic" means any product intended to be rubbed, poured, sprinkled, or sprayed upon, or introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance. "Cosmetic" does not include any product for internal or external use intended to be used for the diagnosis, cure, mitigation, or prevention of diseases of man or other animals, or any product whose label indicates it may be for such use. Soaps are not cosmetics, but as used herein, the term "cosmetic" includes shaving soaps and liquid shampoos.

"Packaged means packaged by or for a manufacturer in a package of a size and type customarily sold to individual consumers ("retail siez package") or in a package of a size and type customarily sold to beauty or barber shops or similar establishments for use in such establishments in their work or services ("professional size package").

"Manufacturer" means any person who packages a cosmetic under his own brand name or causes the same to be packaged for him under his own brand name, except a retailer or wholesaler whose gross sales of all such packaged cosmetics did not exceed $2,500 during the latest calendar year.

—O-P-D—

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Essential Oils

Aromatic Chemicals

Perfume Bases

Essential Oils, Aromatic Chemicals

Essential Oils Stored in Algeria, Tunisia, and "Other French Africa" May Be Released for Export by Allied Victory —Menthol Stocks Inadequate

Interest in the victory of the British, American and French armies over the German and Italian forces in Tunisia was heightened by the fact that one result of throwing the Axis out of Algeria and Tunisia could be a restoration of essential oil exports from those countries to the United States.

Essential oils coming from North Africa are tabulated by the Department of Commerce under the following designation of sources:—Algeria, Tunisia, Morocco, and Other French Africa. Originating in Algeria and Tunisia, geranium and rosemary oils totaling 97,793 pounds were exported to the United States in 1939. From Other French Africa, geranium, lignaloe, palmarosa, petitgrain, clove and vetiver came in the total of 133,871 pounds. Moroccan exports in that year are omitted since the total victory of last week contributed nothing to the export availability of the oils of Morocco. But the victory may also free Syrian exports and the 1939 exports from Syria totaled 10,052 pounds of origanum oil. The figures are those of the Department of Commerce.

By opening the Mediterranean sea to freighters of commerce, such stocks of oils as may have accumulated in Algeria, Tunisia, Other French Africa, and Syria may ultimately appear at United States ports.

Beyond the above heartening developments that may ultimately have an invigorating effect on essential oil supplies was the domestic tangle involving peppermint oil production and the need for making nautral menthol from the domestic oil. Trade interests concerned with menthol sales took frank issue with the government's statement that adequate stocks of menthol exist and hence increase of peppermint production was unnecessary. The matter was understood to have been raised at an Indiana meeting between government officers and peppermint farmers.

Price Changes

Advanced

Anise, 25c. per lb.

Reduced

Lemongrass, domestic, 5c. per lb.

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
245.0	245.1	245.3	329.9

Market news that may have developed after this report was sent to press will be found on page 4.

Essential Oils

Angelica.—For the trifle of oil still available in original packages, strong prices are maintained but not much interest exists.

Anise.—Odd lots ranging in price from $3.10 to $3.25 per pound turn up once in a while but for the most part dealers' shelves are bare of the item. There is little hope for a renewal of supply until Japan is driven out of Burma and the Burma road to China reopened.

Birchtar.—Russian oil still barred from arrival by exigencies of war. Once Germans are cleared from the Ukraine, oil might come forward as result of freeing Mediterranean sea from Axis control.

Bois de Rose.—Definitely steady at all points and selling well in moderate quantities out of equally moderate spot supplies.

Cananga.—Not much activity, but a fair supply is backed by very steady spot quotations.

Capsicum (Oleoresin).—Firm in response to good demand and total lack of weakness as concerns prices prevailing on raw materials available now.

Cassia.—Purely nominal in all its aspects. Nothing available for spot exchange of orders for merchandise.

Cedarwood.—Spring has brought a boost to sales quiet in line with normality. Buyers maintain steady to firm prices and have not too much stock.

Citronella.—Those with satisfactory substitutes are pushing them hard, finding buyers because of the absence of stocks of Java oil on this market. Also, there is not too much Ceylon material to be had and the cost averages high.

Eucalyptus.—Sellers reserved and little disposed to push sales in view of the slowness of replacement and their inability to get all the oil they would like to secure from the Australian market.

Ginger.—The raw material situation could scarcely be tighter, and nothing suggests a loosening of conditions that have kept the supply very small. Oil definitely very firm.

Lavender.—Some even now envisage the time when Allied armies in Europe free the production centers of French lavender oil from the Germans. Believed that there must be substantial stocks stored in the Grasse area.

Lemon.—The twenty-five-pound tins that were formerly returnable to the producers for a refund of $2.50 per tin were so damaged in transit and so badly rusted in some instances that the leading makers won't accept any further returns. Those who have paid deposits and still have drums to return should destroy or dispose of them otherwise and call for a credit to the extent of their present deposits with producers or their agents. Food Distribution Administration contemplates buying 200,000 pounds cold pressed oil. Bids close May 24 at 11:00 a.m.

Lemongrass.—Domestic oil was cheaper at $1.20 per pound but foreign products ranged high as $1.85 per pound in price.

Lime.—Dominica, whence comes some lime oil, now houses British troops landed on the British possession. Move forced by arrival there of refugees from the Vichy French island of Martinique. Dominica island has the French Vichy island of Guadaloupe on its north and Martinique on its south.

Orange.—Too bad orange is not as popular a flavor for chewing gum as are peppermint and spearmint oils. Orange stocks in this country probably top all previous totals and there is real danger of their going higher unless the rule of reason be applied to future import proposals. Food Distribution Administration contemplates buying 700 pounds cold pressed oil. Bids close May 19 at 11:00 a.m.

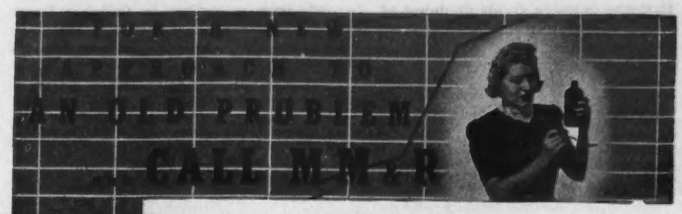
Peppermint.—Conferences between government officers and peppermint farmers reported held last Tuesday at an Indiana point. Evident from talk here that there was probably some disagreement with the recent government intimation that there were ample stocks of menthol here and hence no necessity exists to increase peppermint oil production. Definitely stated here

Association Meetings:—

Flavoring Extract Manufacturers Association, Hotel Pennsylvania, New York, May 24 and 25.

National Association of Insecticide and Disinfectant Manufacturers, Toronto, June 7 and 8.

Current prices on essential oils and aromatic chemicals are given in the alphabetical list of prices beginning on page 9



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that the country is about denuded of natural menthol in suppliers' hands.

Spearmint.—This oil holds high rank as a chewing gum flavoring and chewing gum is definitely a part of all military force equipment. No sign of the government shutting down on spearmint production this year.

Wormseed. — Believed that within the limits set by the General Maximum Price Regulation, high prices will prevail among dealers. What the producer-farmers may want for their oil is added fat in an already high burning fire.

Aromatic Chemicals

Heliotropine.—Reasonably easy and well supplied on spot. Demand fair.

Hydroxycitronellal. — Considerably more competition in this article. Stocks more plentiful in some quarters.

Ionones.—Stocks reported much improved and conditions favor buyers.

Linalool.—Quiet market but firm prices and moderate supplies.

Menthol.—Frank issue taken by some menthol sellers with government's recent allegation that adequate stocks of natural menthol exist. Matter arose when government held peppermint an essential crop when drafting of peppermint farm workers was at issue. See REPORTER, May 3.

Methyl Cinnamate. — Fair supply keeps buyers fairly well stocked.

Methylheptine Carbonate. — Most dealers cleared stocks some time back.

Methyl Salicylate.—Complete price stability achieved without resort to specific price ceiling by Office of Price Administration.

Musk.—Fair progress made with keeping users supplied but the shortage of ambrette has not been greatly relieved.

Phenylacetic Acid. — Steady and stable as to price and consumer demand.

Phenylethyl Alcohol. — Probably little imported material remains. Fair supply of domestic article available at stabilized prices.

Safrol.—Quiet but very firm in all its aspects.

—O-P-D—

Trade Briefs

Pickwick Cosmetic Corporation, this city, has changed its capitalization from $10,000 in $100 shares to 500 shares non par value stock.

Shockley C. Gamage, of Magnus, Mabee & Reynard, aromatic chemicals and essential oils, this city was married recently to Josephine Crater Kidd.

Philip James LoBue is the name of the first boy and second heir born May 4 to Mr. and Mrs. Phil LoBue. Mr. LoBue is the Eastern sales manager for the Michigan Chemical Company and is president of the Salesmen's Association of the American Chemical Industry. Mrs. LoBue and the new heir are reported doing nicely in the Holy Name Hospital, Teaneck, N. J.

Returns to National Can

Arthur G. Hopkins has been elected executive vice-president in charge of engineering and manufacturing divisions of the National Can Corporation, this city. Mr. Hopkins joined the company in 1919 and resigned in September, 1941, to become vice-president in charge of operations for Canonsburg Steel & Iron Works and the Tate Jones Furnace Company, that are engaged 100 percent in war work. He remains an officer and director of both companies.

War Goods Price Adjustment Policy Set

—*Continued from page 3*

his ceiling provided he files an application for a price adjustment within five days.

Moreover, such a seller formerly could collect at his higher price while his application was pending, subject to being required to make a refund if his application was not granted. Under the new provision the seller may not collect an amount exceeding his old maximum price unless OPA approves a new higher price. This action will expedite the making of government contracts and eliminate refund confusion.

3. OPA specifies that the applicant's over-all profits will be an important consideration in determining whether, and how much, relief is granted.

4. OPA specifically authorizes the filing of an application covering a group of related commodities. This procedure was accomplished previously only by interpretation of the original regulation.

5. To avoid multiple reporting to government agencies, an applicant is permitted to omit certain financial data from his application, if he wishes. This information includes simple balance sheets and income statements. If the application is filed in the Washington office of OPA, and if the applicant previously has filed these items with the Bureau of Internal Revenue, OPA will secure the figures directly from that Bureau. Applicants are advised, however, that action will be expedited if they do file the comparatively simple required financial figures with their applications.

—O-P-D—

Glycerin Price Ceiling Revised

—*Continued from page 5*

that when a commodity is governed by production restrictions, such as those of the War Production Board or the Department of Agriculture, a shipment may be considered a carload lot at a lower weight than under previous ODT regulations.

The defintion of a "case" has been clarified so that it states definitely that when a quantity of glass containers of refined glycerin sold is equal to 40 pounds or more, it is to be considered a case, even though each individual package weighs less than 40 pounds. This is to cover variations in industry shipping practices.

Also to conform with normal trade practice, sales by coverters are made f.o.b. converter's shipping point rather than f.o.b. refinery.

As maximum prices for refined glycerin sold by a refiner or a converter in tin or glass containers customarily include the price of the container, the fact that the price of the container is included is stated in tables of specific prices for refined glycerin in such containers.

A change is made in the title of the table of maximum delivered prices for refined glycerin sold by a refiner or converter, so that it now reads "Tin containers of 10 to 49 pounds," instead of "tin containers of 1 to 49 pounds."

The defintion of "importer" is omitted from the regulation, as import sales are to be covered by supplementary regulation No. 12 to the General Maximum Price Regulation, and definitions in the supplementary regulation will control.

—O-P-D—

Fritzsche 25-Year Club Gets Two New Members

Edward W. Keller and James McNamara on April 29 became members of the Quarter of a Century Club of Fritzsche Brothers, essential oils and aromatics, this city. They, together with other members of the club foregathered at Charles Restaurant for a joint celebration on that date. Brief addresses were made by F. H. Leonhardt, president of the company, W. A. R. Welcke, first vice-president and treasurer, and Joseph A. Huisking, also a vice-president who, although not a club member, attended by reason of a special invitation. The club now has twenty members.

Government bonds of substantial denomination were presented to the new members in recognition of their long service and employees of the organization also offered gift to commemorate the occasion.

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Petroleum Derivatives

Situation in Crude Petroleum and Derivatives Tightening Further As Prospect for General Price Advances Vanishes and Occasional Boosts in "Needy" Fields Become Only Potentialities

Renewed and intensified efforts have been put forth within the past week by congressional supporters of the independent petroleum producers' urgent request for a general advance of 35 cents per barrel in the maximum permissible prices of crude oil, to obtain authorization of such a markup from some other federal authority after the Office of Price Administration had rejected the Petroleum Administrator's ably-presented application for this universal lifting of the crude oil ceilings, which, it has been contended, would furnish an efficient incentive for swelling the country's output by the bringing in of new fields and by amplifying the yield of secondary recovery wells of the "pumper" type. But all to no effect.

With the prospect darkened for a broadened flow of crude oil from the fields and for a building up of reserves sufficiently to keep pace with the hugely increasing war production requirements, crude oil supplies available for refineries having no production of their own and engaged in turning out petroleum derivatives for purposes outside the war effort have been further diminished. So has the output of aromatic and other naphtha solvents and liquified gases, designed for non-essential use, which has been held down additionally by the diversion of many sizable fractionating capacities to the production of the lighter hydrocarbons called for increasingly as components of 100-octane gasoline for the air forces and for the speeding up of the federal government's synthetic rubber program. The shortage of paraffin has reached an acute stage.

Although it is still expected that upward revisions of ceiling prices for crude oil, like those already granted in California and Wyoming, will be authorized by OPA in individual instances, as the need for stimulating the flow from certain fields becomes especially pressing, there now seems to be little likelihood that any general advance will be allowed.

Price Changes

Advanced

Fuel oil, Western Pennsylvania, lower field, Nos. 2, 3 and 36-40 gravity, ¼c. per gal.

Gasoline, Western Pennsylvania, upper field, "Q" grade (minimum 70-octane ASTM), 1.2c. per gal.

Reduced

Fuel oil, California, Pacific specification 400, 5c. to 15c. per bbl.

Market news that may have developed after this report was sent to press will be found on **page 4.**

Solvents and Diluents

Aromatic Solvents.—Extensive draining of diminishing output and supply of xylol-based light hydrocarbons, in furthering the federal government's synthetic rubber program and air forces' high-octane gasoline needs, is keeping stocks of the allocated high-solvency aromatics at a low ebb. Consumers unable to procure WPB authorization to buy these grades are turning in steadily mounting numbers to the grades outside allocation and in lesser measure to the aliphatics.

Cleaners' Naphtha. — Continuing in brisk call.

Lacquer Diluent.—Buying movement still rising.

Mineral Spirit.—Keen interest shown in all grades.

Rubber Solvent.—Demand running higher daily as synthetic rubber production gains momentum.

Stoddard Solvent.—In constantly increasing request.

V. M. & P. Naphtha.—Moving fairly well into paint industry but with war production contractors obtaining greater part of offerings.

Markets at Other Centers

Chicago—May 14

Aromatic Solvents.—Movement fairly brisk but hampered by restrictions imposed by allocation requirements on naphtha with distillation points under 300 degrees.

Cleaners' Naphtha.—In steadily expanding request.

Lacquer Diluent.—Continues in active demand.

Mineral Spirit.—Buying goes on in sizable volume.

Rubber Solvent.—Still moving rapidly and in increasing proportions.

Stoddard Solvent.—Purchasing interest continues keen.

V. M. & P. Naphtha.—In moderate call from paint trade.

Los Angeles—May 14

Aromatic Solvents.—Continue in active demand but diminishing supply for non-essential uses.

Lacquer Diluent. — Buying interest keen but supplies inadequate.

Rubber Solvent.—In steadily increasing request.

Stoddard Solvent.—Purchasing movement running in excess of supply.

V. M. & P. Naphtha. — Paint trade making sizable purchases.

Tulsa—May 14

V. M. & P. Naphtha.—Shortage in transportation facilities tending to hold down movement to paint industry which otherwise would reach still large proportions.

Lighter Fractions

Butane.—Supplies fast diminishing under active buying movement.

Heptane.—In steadily increasing request.

Hexane.—Demand mounting for this component of materials used on increasing scale in making synthetic rubber and 100-octane gasoline.

Octanes.—Buying interest attaining fair-sized proportions.

Pentanes.—Continue moving in fair volume.

Propane.—Steady expansion noted in purchasing movement arising from extension of synthetic rubber program, high-octane gasoline production, and other uses.

Markets at Other Centers

Chicago—May 14

Butane.—Moving in constantly expanded volume.

Heptane.—Continues in moderate call.

Hexanes.—In increasing request.

Octanes.—Keep moving steadily into consuming channels.

Pentanes.—Brisk inquiry noted from all users.

Propane. — Demand far outrunning supply.

Los Angeles—May 14

Butane. — Demand active. Supply available for non-essential uses greatly reduced as production is still being channeled into high-octane gasoline program.

Propane. — Moving into consuming channels as rapidly as produced.

Tulsa—May 14

Butane.—Continues in increasing demand. Consumers' needs far in excess of current supply.

Propane.—Keeps moving as extensively as supply permits.

Petrolatums and Waxes

Amorphous Waxes.—Still moving in fair volume.

Paraffin.—Shortages in both crude scale and fully-refined grades reaching appalling proportions. Leading refiners have no white and yellow crude scale save the 122-124 and 124-126 A.M.P. kinds and are now lacking in refined grades beyond 135-137 A.M.P., although still furnishing nominal quotations on 138-140, 143-145 and 149-151 A.M.P. grades.

Petrolatums. — Moderate movement continues noted in veterinarian and industrial as well as U.S.P. grades.

White Mineral Oils.—Steady inquiry still reported for technical and U.S.P. grades.

Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 9

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Markets at Other Centers

Chicago—May 14

Paraffin.—In increasingly request but meager supply.

Petrolatums.—Expanding movement recorded in all grades.

White Mineral Oils.—Buying interest still mounting.

Los Angeles—May 14

Paraffin.—Current supplies wholly inadequate for increasing requirements and no increase in production is yet planned.

Fuels and Lubricants

Crude Petroleum.—The growing diminution of the flow of crude oil from the production fields in Pennsylvania, the Mid-Continent and Southwest is fast reaching an acute stage while the call for this oil from refineries engaged in supplying the war fronts continues to mount. Meanwhile, relief from the increasing tightness of this situation, by recourse to supplies from South America, such as are normally received by East Coast plants, is impractical, because of the continued submarine warfare against tankers.

Evidence of the crisis threatened in the Pennsylvania refining industry, as a result of this crude oil shortage has been furnished within the past week by the action of the South Penn Oil Company in ordering a curtailment of deliveries of crude oil to Western Pennsylvania refiners by 15 percent as of June 1 and 20 percent by July 1. That the situation in the Pennsylvania fields is being paralleled in the Mid-Continent field is strongly suggested by news that crude oil suppliers to refiners there have already reduced their shipments 100,000 barrels daily.

So severe is the growing tension in the crude oil supply situation in Pennsylvania that the South Penn Oil Company has announced the necessity of curtailing its deliveries of such oil to western Pennsylvania refiners by 15 percent by June 1 and 20 percent by July 1 from the volume of deliveries made by it in May. Other producers and suppliers in that area may eventually be forced to take similar action. And a like crisis is believed to be threatened in the Southwestern oil fields.

Fuel Oil.—Little hope is now entertained in well-posted quarters that the collapse of Axis resistance in North Africa will in any wise lessen the drain on fuel oil and gasoline stocks along the Eastern Seaboard, either immediately or in the nearby future. Hence continuance of rationing on at least the present drastic scale is generally foreseen.

While refineries in the lower field of Western Pennsylvania have marked up their prices for Nos. 2 and 3 and 35-40 gravity oils to the extent of a quarter cent additional per gallon, some refiners in California, where the situation is easier, have lowered their quotations for Pacific Specification 400 1 cents to 15 cents per barrel.

—O-P-D—

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and
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REFINING COMPANY, INC.
ENGLEWOOD N. J. - BRADY, WARREN PA

Rosin's Roles In Varnishmaking

—Continued from page 7

figure to 5.62 in the lime-hardened rosin here shown and explained:—

Lime-Hardened CP Rosin

H rosin	400 lbs.
Quicklime	1 lb.
Crude glycerin	42 lbs.
Net product	350 lbs.

Weigh out the rosin and place it in the aluminum still; then sprinkle the pulverized quicklime over the surface of the rosin. The lime should be pulverized fine enough to pass a 100 mesh sieve. Next, close the manhole which must be fitted with an asbestos gasket and luted with soap; then ascertain that the valves between the still and the vacuum pump are open and in proper working order. The secondary or safety condenser next to the vacuum pump should contain just enough water to alkaline absorbent to cover the mouth of the bent pipe from the primary receiver next to the still. Also ascertain that the relief valve in connection with the vacuum gauge is in proper working order, and that the draw-off valve at the bottom of the still is tightly closed.

Start the vacuum pump now in order to see if any leaks develop; as it is absolutely necessary that the apparatus be perfectly airtight, otherwise it will be impossible to maintain a 25-inch vacuum. When assured that the apparatus is airtight, and that a 25-inch vacuum can be held during the entire process of distillation, light the gas burners; then fill the glass globe-funnel with a measured quantity of glycerin.

When the rosin is melted and has reached a temperature of 500° or 525°, commence feeding in the glycerin at the rate of 8 fluidounces every seven and one-half minutes, which is equivalent to a half-gallon of glycerin an hour and is based on an eight-hour distillation process, the time required to eliminate all of the volatile resin acids. It will be noticed that, as the temperature of the still rises, the vacuum gauge drops, consequently the vacuum must be such that the gauge indicates not less than 25 inches when the thermometer shows a temperature of 525°.

When the glycerin is fed in, a violent reaction takes place, but later, as the resin or abietic acid is being eliminated, the reaction becomes less violent. The ideal way of adding the glycerin is to set the stopcock of the globe-funnel so that the glycerin may be fed in drop-by-drop and still deliver the required amount in the allotted time. This can be done after the operator has had some experience with the process; furthermore, the reaction is less violent, and the acid will be driven off more quickly.

At the end of eight hours when all the glycerin has been used up, shut off the gas burners and allow the contents of the still to cool down to 420°; then carefully release the vacuum and draw off the melted rosin into a cooling box or pan.

Usually it takes about two hours at the start to raise the heat to 500°, and after the heat is turned off another two hours for the melted rosin to cool down to 420°; hence the process for the complete elimination of the volatile resin acid is a twelve hours' operation, from start to finish.

(To be continued)

—O-P-D—

Wage Adjustments Authorized by Byrnes

—Continued from page 3

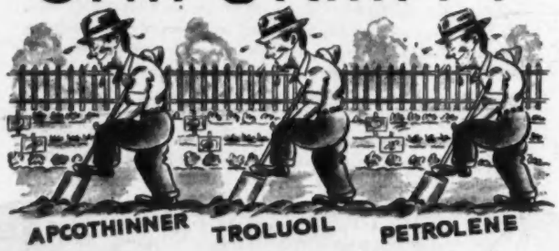
members or the public members of the board would have liked, it did provide the board with a degree of flexibility to meet many of the demands now being made for wage adjustments and provided a more clearly defined purpose of the "hold-the-line" order.

In a statement explaining the new policy, Mr. Byrnes made it clear, however, that the relaxation of the restrictions on wage adjustments in nowise abandons the "Little Steel" formula.

—O-P-D—

Utah Oil Refining Company, Salt Lake City, has started construction on a high octane gasoline plant at an estimated cost of $55,000.

UNIFORMITY



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Fertilizer Materials

War Food Administration Gives Optimistic Outlook for Essential Fertilizer Materials — Ammonia Nitrate Lower —Urea Quoted at Lower Prices

Fertilizer mixers have taken considerable interest in the recent order of the War Food Administration regulating the distribution of organic nitrogen supplies. So far, there has been nothing definite revealed as to how this new plan is going to work out. Mixers are not keen on going ahead with production until they are assured of securing their materials. According to WFA, the total tonnage of fertilizers available for this year will exceed the amounts in either 1941 or 1942. The increase is accountable to approximately 10 percent additional phosphate and 17 percent additional potash as compared with a year ago, while a slightly smaller supply of nitrogen will be available. Control over manufacture and use of fertilizers assures 100 percent of requirements for essential war crops.

Superphosphate production continued to increase during March. Estimates place the increase at 14 percent over the same month in 1942. Shipments to mixers and use in mixed goods during this month were seasonally high. Shipments to consumers were low in comparison with past years. Since production was substantially less than the tonnage shipped, there was another decline in stocks, with the drop larger than the usual decline in March. Supplies at the end of the month were not much larger than March consumption. Ammonia nitrate prices are lower at Canadian shipping points.

A leading producer of crystal urea has revised the selling schedule downward. New prices become effective May 15. A uniform reduction of $5.00 a short ton is recorded f.o.b. works and at shipping ports.

Included in the weeks imports were substantial quantities of castor beans and moderate lots of phosphate rock and manganese ore.

Maximum price regulation on agricultural liming materials has been issued by OPA. The regulation covers sales by producers, truckers and retail dealers, cooperative farm associations and U. S. Government agencies.

Price Changes

Advanced

None

Reduced

Ammonia nitrate, $9 per ton.
Crystal urea, $5 per ton.

Comparative Values

Index numbers compiled from four typical fertilizer materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
71.8	71.8	71.8	71.0

Market news that may have developed after this report was sent to press will be found on page 4.

Nitrogenates

Castor Pomace.—Government purchases of this material have left the market in short supply and there was a pronounced scarcity for civilian use. Recent arrivals of castor beans have been liberal and producers have been able to increase production to some extent.

Ammonia Nitrate. — Lower prices have been established for this material. Shipments are being made throughout the Delta areas on the basis of $47.65 a ton in bags, f.o.b. Canadian producing points.

Ammonia Sulphate.—Buying conditions have remained tight with demand sufficiently active to absorb output. Former prices prevailed. Production for the first quarter was given as 189,041 tons compared with 169,362 tons for same time last year. Estimates on operations of by-product cokeovens for the week ended May 8 indicate a production of 38,166,440 pounds from that source.

Fish Scrap.—Outlook does not appear favorable for an adequate supply. Fishing companies have been sold out for several weeks. Florida menhaden fishing was not successful and in northern waters, the fleet has remained idle. The government has taken over several ships from the fishing fleet and this has reduced the number of vessels available. The season opens for the Carolinas about June 1 and around June 15 for Chesapeake Bay. The herring season has just started. Scrap when ground into meal is expected to be used more for feeding purposes than for fertilizer requirements.

Manganese Sulphate. — Producers have satisfied consuming requirements and supplies have been sufficient to meet demand. The market was quoted steady on the basis of previous quotations. Moderate arrivals of manganese ore were reported.

Soda Nitrate. — Contract shipments for government and agricultural requirements are going forward in steady volume. Moderate quantities of foreign material have recently reached the market. The price tendency was firm.

Urea. — A leading producer has reduced quotations on crystal urea $5.00 per ton. Carloads per short ton are offered at $75.00, f.o.b. Belle, West Virginia, or following ports:—Boston, New York (Metropolitan area), Philadelphia, Wilmington, Del.; Baltimore, Norfolk, Wilmington, N. C.; Charleston, Savannah and Jacksonville. Less car lots are held at $77.50 per ton, Belle, West Virginia. Lots from 5 to 19 tons—$80.00 per ton f.o.b. Boston, New York, Philadelphia, Wilmington., Del., and Baltimore.

Fertilizer Tag Sales: April

	Equivalent tons		
	April—		Jan.-Apr.
	1943.	1942.	1943.
Virginia	58,489	53,621	273,724
North Carolina	201,706	134,595	978,995
South Carolina	98,148	75,605	645,895
Georgia	106,338	114,027	804,714
Florida	64,210	55,796	308,370
Alabama	87,800	96,650	568,800
Mississippi	50,800	55,025	291,736
Tennessee	54,273	41,960	154,039
Arkansas	24,935	15,400	135,485
Louisiana	29,150	19,850	137,063
Texas	24,050	15,700	113,280
Oklahoma	2,400	1,091	14,571
Total South	802,499	679,190	4,426,622
Indiana	40,325	37,855	197,125
Illinois	7,012	15,336	53,734
Kentucky	27,625	29,525	92,008
Missouri	5,272	4,237	42,346
Kansas	1,291	840	3,290
Total Midwest	81,525	87,813	388,498
Grand totals	884,024	766,503	4,815,120

Association Meetings:—

National Fertilizer Association, Hot Springs, Va., June 21 to 23.

Current prices on fertilizer materials are given in the alphabetical list of prices beginning on page 9

Superphosphate has remained uncertain from a supply standpoint. The amount to be used on lend-lease for Britain has continued indefinite.

Potashes

Buying interest has expanded since the announcement of 1943-1944 shipment quotations, and the amount of orders entered has established a satisfactory seasonal average. While labor shortage has continued a disturbing influence, output has been well sustained.

Sulphur and Pyrites

Although the call for sulphur shipments was heavy, supplies were adequate to meet all inquiries. Demand was reported steady, both for government and civilian requirements. Prices were firm and without suggestion of chance. Pyrites moved quietly at former price levels.

Markets at Other Centers

Atlanta, May 14.—Additional amounts of ammonium nitrate are reported available and are being shipped to Georgia, Florida, Alabama and Southwestern points for use as top dressings. Prices are $47.65 and $48.05 for different grades, f.o.b. Canadian shipping points. Both May and June allocations of sulphate of ammonia have been made which ends the year's allowance. Nitrate of Soda is moving on monthly allotments and is reported about equal to the demand for top dressings.

No organic nitrogenous materials are now available for fertilizer purposes by government action. Trading is confined to the feed trade.

Quotations on the few materials available are as follows:

Superphosphate.—61c. per unit, interior producing points.

Nitrate of Soda.—Allocated, bulk, $30 per ton, ports.

Sulphate of Ammonia.—$29 per ton, ports, $29 at ovens.

Ammonium Nitrate.—$47.65 to $48.05 per ton, f.o.b. Canadian producing points.

Chicago, May 14.—Offerings of various grades of fertilizer materials have been along limited lines. Blood is quiet. Tankage business is fair. Bone materials are in good call.

Dried Blood. — Principal grade, $5.58 per unit of ammonia.

Tankage. — Feeding grade, unground, $5.53 per unit; liquid stick, tankcar, $3.45 to $2.50; hoof meal, $4.25 to $4.35.

Bone Materials. — Ground, steamed bone, $35 to $36 per ton; cattle jaws, skulls and knuckles, $40 to $42; dry, rendered tankage, hard pressed, $1.21; 50 percent bone and meat scrap, $68.

Los Angeles, May 14.—The commercial fertilizer picture last week remained as drab as ever insofar as the supply situation was concerned and trading was practically at a standstill in all divisions, especially so in organics since the receipt here of the Government order prohibiting the sale of organics until June 1.

Fish Meal—Trading at a standstill with no additional offerings. Ceiling on 67 percent protein meal at $77.50 per ton, plus carrying charges.

Nitrate of Soda.—Quoted at $33 per ton in 100-pound bags; $32.50 in 175-pound bags; bulk lots at $30, f.o.b. cars, Oakland or San Pedro.

Phosphates

Cottonseed Hull Ash. — Shipments have moved northward to New England to fertilize the tobacco areas.

Phosphate Rock. — American production is sufficiently heavy to meet consuming requirements. Shipments of both Florida land pebble and Tennessee brown rock were of satisfactory seasonal dimensions. Moderate importations from Africa have been received. Britain is operating the mines in Morocco which were formerly held by Germany. Material reaching the U. S. has been brought over as ballast.

Superphosphate.—Production figures for March show an increase of 14 percent over a year ago. Output for the first quarter was equal to about 13 percent more than the same period in 1942. Total shipments for March were 572,288 tons and stocks on hand at the end of March were 595,647 tons. These included 14,952 tons of concentrated 45 percent. The outlook for triple su-

Current Market Quotations

—*Continued from page 29*

Zinc, carbonate, tech., bbls.	lb.	.14 -	.20
USP, precip., powd., bbls.	lb.	.35 -	—
dms.	lb.	.40 -	—
kgs.	lb.	.37 -	—
Chloride, tech., fused, c.l., works	100 lbs.	5.00 -	—
l.c.l., works	100 lbs.	5.35 -	—
gran., dms., c.l., works	100 lbs.	5.75 -	—
l.c.l., works	100 lbs.	6.50 -	—
USP, dms.	lb.	.20 -	.31
jars	lb.	.36 -	—
solution, 50%, dms., c.l., wks.	lb.	.0315-	—
l.c.l., works	lb.	.04¼-	.04¾
tanks, works	lb.	.0250-	—
Chromate (see Yellow, Zinc).			
Cyanide, kgs., works	lb.	.33 -	.37
Dust,[4] bbls., c.l., dlvd	lb.	.1085-	—
l.c.l., works	lb.	.1135-	—
Fluoride, bbls.	lb.	.25 -	.30
Iodide, NF, bots.	lb.	4.54 -	—
jars	lb.	4.49 -	—
Metal,[1,2,3] (quotations in Paint Market report).			
Oxide,[6] pigment, dom., acicular, bgs., c.l., dlvd.	lb.	.07¼-	—
l.c.l., dlvd.	lb.	.07¼-	—
lead free, bgs., c.l., dlvd.,	lb.	.07¼-	—
l.c.l., dlvd.	lb.	.07¼-	—
5%, bgs., c.l., dlvd.	lb.	.07¼-	—
l.c.l., dlvd.	lb.	.07¾-	—
85% or more, bgs., c.l., dlvd.	lb.	.07 -	—
l.c.l., dlvd.	lb.	.07¼-	—
French process, com'l, lead free, bgs., c.l., dlvd.	lb.	.07¼-	—
l.c.l., dlvd.	lb.	.07¼-	—
green seal, bgs., c.l., dlvd.	lb.	.09 -	—
l.c.l., dlvd.	lb.	.09¼-	—
red seal, bgs., c.l., dlvd.	lb.	.09¼-	—
l.c.l., dlvd.	lb.	.09¾-	—
white seal, bgs., c.l., dlvd.	lb.	.09¼-	—
l.c.l., dlvd.	lb.	.09¾-	—
USP, 50-lb. ctns., c.l.	lb.	.10¼-	—
l.c.l.	lb.	.10¾-	—
Zinc oxide in bbls. ¼c. higher; Pac. cst. ½c. higher, c.l., dlvd., l.c.l ex whse.			
Palmitate, bbls.	lb.	.32 -	.33
Resinate, fused, pale, bbls.	lb.	.11 -	.12
precipitated, dms., dlvd.	lb.	.15 -	—
Silicofluoride, bbls.	lb.	.15 -	.18
Stearate, tech., ctns., c.l. frt. equald.	lb.	.29 -	—
ton lots, frt. equald.	lb.	.30 -	—
smaller lots, frt. equald.	lb.	.31 -	—
USP (same prices).			
Sulphate, cryst., bgs., c.l.	100 lbs.	3.60 -	—
l.c.l.	100 lbs.	4.25 -	—
flake, bgs., c.l.	100 lbs.	4.10 -	—
l.c.l.	100 lbs.	4.85 -	—
powd., bgs., c.l.	100 lbs.	5.80 -	—
l.c.l.	100 lbs.	6.55 -	—
Zinc sulphate in bbls. 25c. higher.			
Sulphide,[1,2] pure, bgs., c.l., dlvd.	lb.	.08¼-	—
l.c.l., dlvd.	lb.	.08¾-	—
bbls., c.l., dlvd.	lb.	.08½-	—
l.c.l.	lb.	.09¾-	—
barium pigment, bgs., c.l., dlvd.	lb.	.0580-	—
l.c.l., dlvd.	lb.	.0585-	—
calcium pigment, bgs., c.l., dlvd.	lb.	.0560-	—
l.c.l., dlvd.	lb.	.0585-	—
magnesium pigment, bgs., c.l., dlvd.	lb.	.05¾-	—
l.c.l., dlvd.	lb.	.06 -	—
Zinc sulphide on Pac. cst. ¼c. higher for pure, ½c. for others.			
Sulphocarbolate, NF, bbls., dms.	lb.	.28 -	.31
Yellow (see Yellow, Zinc).			
Zinc-ammonia chloride, dms., c.l., works	100 lbs.	5.65 -	—
l.c.l., works	100 lbs.	6.70 -	—
Zinc-iron oxide pigment, bgs., c.l., dlvd.	lb.	.06 -	—
l.c.l., dlvd. E. of Rockies.	lb.	.06¼-	—
dlvd., Pac. cst.	lb.	.06½-	—
ex whse., Pac. cst.	lb.	.07 -	—
Zirconium nitrate, kgs., works	lb.	3.00 -	4.00
Oxide, crude, 70-75%, grd., bbls., works	ton	75.00 -	100.00
white, 98%, grd., kgs., works	lb.	1.80 -	2.00

Domestic SULPHATE of AMMONIA
AND AMMONIA LIQUOR
MADE IN THE U.S.A.
Barrett NITROGEN
THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET • NEW YORK, N. Y.

CRUDE SULPHUR
99½% PURE
Free From
ARSENIC, SELENIUM AND TELLURIUM
TEXAS GULF SULPHUR COMPANY
(INCORPORATED)
75 East 45th St., New York City
Deposits and Plants: Newgulf and Long Point, Texas

FMC

WE SAVE!

99% Materials
95% Manpower

RECLAIMING USED EQUIPMENT!

When you buy from F.M.C. you always receive a machine rebuilt to give real service.

MILLS and PULVERIZERS

2—Mikro No. 4 Pulverizers, 24"; with motors.
6—Schutz O'Neill Sugar Mills and Pulverizers.
1—Lard Cooling Roll, 3'x6'. Roller Mill.
Wolf 3 stand high Roller Mill. Muncy Attrition Mills, single and double Runner.
Sprout Waldron 16" Attrition double Runner Mill.
Raymond, Williams, Gruendler and other Hammermills.
Atlantic Utility Cake-breaker with feeder.
6—Thropp, Silex Lined Pebble Mills, 6 x6'.
5—Patterson Silex Lined Pebble Mills, 18"x24"; 23½"x21"; 20"x32"; 20½"x33"; 32½"x44".

DRYERS and KILNS

4—Mosser Tapered Kilns, 7'6"x60'.
3—Louisville Rotary Steam Tubular Dryers, 6'x35'.
2—J. P. Devine Co. Rotary Vac. Dryers, 5'x30'.
1—Proctor & Schwartz Apron Type 3 Pass Dryer.

MIXERS

1—Broughton Double Arm Mixer, 54½"x47"x23".
1—Abbe Lenart No. 4 55 gal. Mixer; Pulley Drive.
1—W&P 50 gal. Jktd. Mixer.
1—W&P Vacuum Type Jktd. and agitated; 100 gal. working capacity.
1—Ross 40 gal. Mammoth Pony Mixer.
8—Pony Mixers; Day Ross Kent; 8 gal. and 15 gal.
15—New and Used Dry Mixers, 200 lbs. to 2,000 lbs.
4—Heavy duty jktd. and agitated mixers; 2,000 lbs. capacity each.

2—Chrome Steel 6,000 gal. Vertical Storage Tanks.
3—Ceramic Stoneware Oblong Tanks; about 550 gal. each.
1—Package Machinery Co. Cube Wrapper.
1—Natl. Packaging—2 Station automatic powder Filler.
1—Glass Lined 1,200 jktd. Tank.
35—Steel Storage Tanks, up to 20,000 gal.
1—Sweetland No. 10 Filter Press, 54 leaves; Lead covered.
6—Copper Vacuum Pans, jktd., up to 500 gal.
110—New and Rebuilt steam jktd. Copper Kettles, up to 500 gal.
1—Steel rotary Extractor, Bartlett & Snow, 6'x18'.
2—Sharples super Centrifuges, clarifier type.
1—Lard Cooling Roll, 8'x6'

WANTED:
Idle machines, single items or whole plants. YOU can help war production by sending us your list.

Call on us for further details.

Just off the press—FIRST FACTS! Send for your copy

FIRST MACHINERY CORP.
FMC
9th St. & EAST RIVER DRIVE
NEW YORK CITY

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE

Help Wanted and Positions Sought — Minimum $2.00, thirty-six words or less; 35c for each additional six words.

All Other Classified Advertisements — $5.00 thirty-six words or less; 85c for each additional six words or fraction.

Agencies Wanted

WELL ESTABLISHED Australian chemical manufacturer desiring round out their line, would act as exclusive sales agents for American manufacturers of other chemicals. BOX 416, Oil, Paint and Drug Reporter.

CINCINNATI FIRM with more than twenty years' experience covering Dayton, Columbus and Louisville, Kentucky, would consider representing actual producers of colors, oxides, oils, chemicals or other materials. BOX 442, Oil, Paint and Drug Reporter.

Equipment Wanted

EPPENBACH HOMO mixer lab size No. 1, stainless steel, two-gallon capacity; BOX 433, Oil, Paint and Drug Reporter.

Equipment Wanted

WANTED—Our expansion program requires additional equipment. We need iron and wood filter presses, jacketed kettles, mixer, pulverizer, dryer, etc. No dealers. Send your offerings to BOX 410, Oil, Paint and Drug Reporter.

Facilities Wanted

WOULD LIKE batches of few hundred pounds finely ground material treated with warm benzene and the benzene solution extracted with cold diluted sulphuric acid. The sulphuric acid extracts to be delivered to us in carboys. BOX 427, Oil, Paint and Drug Reporter.

Materials Offered

PAINTERS CAPS, paperhanger aprons and all other forms of cloth advertising specialties; samples and information on request. Minnesota Specialty Co., 119 N. Fourth street, Minneapolis, Minn.

Materials Wanted

DO NOT wait until conditions further limit the prospects of disposing of top-heavy inventories. Will purchase surplus or unshipped commodities all kinds. Particularly interested gums, waxes, spices, botanicals, oils, greases, pharmaceuticals, chemicals. BOX 409, Oil, Paint and Drug Reporter.

—Continued on page 77

FOR SALE

2—4 x 6' Buffalo Vacuum Drum Dryers.
2—Triple Effect Evaporators.
1—Raymond 2-roll high side Mill.
2—4 x 10' and 6 x 15' Tube Mills.
1—600 sq. ft all-copper Condenser
1—Day No. 10 jacketed Imperial Mixer.
2—12 x 32" and 16 x 40" 3-roll Mills
4—Lead Lined Tanks, 400-1000 gallons.
4—Sharples and De Laval Clarifiers.
10—Variable speed Drives 1½-7½ h.p.

Liquidating Tennessee phosphate plant.
Send for illustrated folder.
What equipment have you for sale?

LOEB EQUIPMENT SUPPLY CO.
909 N. Marshfield Ave., Chicago, Ill.

Wanted . .

EXPERIENCED
TABLET MANUFACTURER

to manage department; also assistant to manager; as well as experienced Tablet Coater, for a New England Pharmaceutical company. Steady work with good chance for advancement. Box 434, Oil, Paint and Drug Reporter.

FOR SALE

4—100 gallon WERNER & PFLEIDERER mixers
3—12 in. x 30 in. Roller Mills
2—16 in. x 40 in. three steel roller mills
PONY MIXERS from 2½ gallons to 40 gallons
5—Change Can Mixers
1—Kent 9 in. x 22 in. - 5 roller High Speed ROLLER MILL
3—32 in. x 36 in. PEBBLE MILLS
10—1000 gallon steel square storage tanks
10—2000 gallon steel square storage tanks
5—9 in. x 24 in. motor driven roller mills

Specializing in Rebuilt Machinery
IRVING BARCAN COMPANY
30 CHURCH ST., NEW YORK, N. Y

Today even **TIME** *is Rationed*

Save time—get your Equipment...from Time Saving "CONSOLIDATED"

LIQUIDATION

Equipment of Waste Disposal and Reduction Plant Boston Harbor, Mass.

4—5'x40' Direct Heat Rotary Dryers

SPECIAL
20—Open and Closed, Steel Storage and Pressure Tanks, 500 to 17,000 gallons

18—Digestors, tile lined, cone bottom, 7'5" dia.x16', 5,000 gallons
2—Bartlett & Snow Percolators, 8'7" dia. x 15' long
2—Bartlett & Snow steam jacketed Reducers, 10' dia. x 4' deep, sweeping agitators
1—Sturtevant Fertilizer Unit, complete, including grinder, elevator, screen, mixer, etc.
1—Mitts & Merrill CRE No. 15 Shredder, 75 HP motor
1—Hydraulic Press, 42" platen, with hydraulic pump
3—250 HP Heine Water Tube Boilers, 150 lb. pressure, Mass. std.
1—Baldwin Steam Locomotive, 27 ton, standard gauge
1—Curing Chamber, 15' x 21' x 27' high

Miscellaneous: Steam Pumps, Motors, Steam Engine, Royer Disintegrator, Model C-2

Send for Complete List

8—PEBBLE MILLS: 1—Patterson 6'x7', Silex Lined; 1—6'x5', Steel Lined; 1—32"x42" rubber lined; other sizes.
6—3 ROLLER MILLS, up to 16x60.
8—2,000 lbs., 1,000 lbs., 600 lbs., DRY POWDER MIXERS; other sizes.

4—W. & P. MIXERS, size 21-X-DB jacketed 625 gal.; 1—size 15, 100 gal. jacketed; 1—size 14, 50 gal. jacketed; other sizes.
4—4'x9' Iron OLIVER CONTINUOUS FILTERS.
9—HEAT EXCHANGERS, Ahlberger; 50, 100, 300, 440 sq. ft. heating surface; other sizes.
3—Cresson Morris 48" Copper basket, direct m.d. CENTRIFUGALS, Ball bearing.
5—RAYMOND PULVERIZERS; 5-roll High Side; No. 1 beater Type; No. 0000.
1—Scott single effect Glycerine EVAPORATOR.
1—Day No. 30 Imperial jack. MIXER; 1—No. 10 jacketed.
1—Schaeffer size 14 POIDOMETER.
1—Lummus 6" COPPER COLUMN, with Still Pot, Condenser and Dephlegmator.
1—Vilter AMMONIA COMPRESSOR, twin horiz. 250 tons, direct m.d. to West. 500 HP synchr. Motor, 3-60-440 V.
1—Vilter AMMONIA COMPRESSOR, 40 tons, m.d. with 100 HP, 3-60-440 V.
15—RUBBER LINED Rectangular TANKS, 1—220 gal.; 2—1,000 gal.; 9—500 gal.; 2—200 gal.; 1—150 gal.
2—Rotary VACUUM DRUM DRYERS; 1—Buffalo 48"x40" Single Bronze Drum; 1—Devine 3'x9' Double Bronze Rotary Vacuum Drum Dryers.
10—ROTARY VACUUM DRYERS; 3—Buffalo 5'x20'; 5—Devine 4'x25'; 1—Devine 4'x30'; 1—Struthers Wells 30"x12'.
3—ATMOSPHERIC DRUM DRYERS; 2—Anco 4'x9', single drum; 1—4'x8'.
35—25 gal. MONEL open TANKS; 12—45 gal.
2—36"x84" Double Drum ATMOSPHERIC DRYERS (new); 3—28"x60", S. & C. m.d.
35—CENTRIFUGAL EXTRACTORS, 12" to 72" bronze and steel baskets, belt and motor drives.
1—PNEUMATIC SCALE PACKAGING UNIT.
2—Batteries of sash TYLER HUMMER SCREENS, 4'x3', single deck, other sizes.
1—14' dia. WEDGE FURNACE, 7—hearth, complete.
5—Direct Heat Rotary DRYERS; 1—8'x24' Iroquois and 1—5'x30' Iroquois, ½" shells; 3—4'x30'.
1—36" dia. Cast Iron COLUMN, 23" high.
2—6' dia. x 2' deep Bartlett & Snow steam jacketed COOKERS or DIGESTERS.

LIQUIDATING

Former
LION BREWERY
108th St. and Columbus Ave. New York, N. Y.

24—Horizontal 10' dia. x 22' long, WOOD TANKS, 3" staves, 14,000 gals.

Miscellaneous: Brew and Bottling Equipment, 8,000 gal. Jacketed, Agitated Kettles, Boilers, Pumps, Keg Equipment, Rubber Tubing, Tons of Pipe, Valves and Fittings.

SEND FOR PRINTED CIRCULAR
ARRANGE TO INSPECT—REPRESENTATIVE ON PREMISES

1—P. & S. 9-truck ATMOSPHERIC DRYER, 1,562 sq. ft. tray surface.
1—355 c.f.m. Ingersoll Rand AIR COMPRESSOR, 100 lb., A.C. motor.
1—20' dia. x 10' DORR THICKENER.
1—Church VOLUMETER, for proportioning.
1—4'x10' ROD MILL, steel lined.
1—Dings MAGNETIC SEPARATOR, for 15" belt.
1—TRIPLE EFFECT EVAPORATOR, cast iron bodies, copper tubes and copper tube sheets, total 4,400 sq. ft. heating surface, complete with pumps.

WANTED: Idle Machines
Single Items or Complete Plants.
You can help War Production by sending us your list.

Send for "Consolidated News" listing complete stock

We Buy and Sell From a Single Item to a Complete Plant

FOR 25 YEARS A STANDARD OF CONFIDENCE

CONSOLIDATED PRODUCTS CO., INC.
13-18 Park Row, New York
Shops: 335 Doremus Avenue, Newark, N. J.

Business Wants and Offers

—Continued from page 76

Materials Wanted

WILL PURCHASE your surplus and discontinued chemicals, drugs, oils, waxes, dyes, solvents, etc., and will pay highest cash prices for same. Thoroughly familiar with WPB regulations. Will make immediate offer. Write fully. BOX 411, Oil, Paint and Drug Reporter.

Plants Wanted

PLANT in New Jersey, equipped to manufacture water soluble product. Open steam jacketed kettles large capacity, agitators filter, storage tanks and etc. Cash. BOX 441, Oil, Paint and Drug Reporter.

Positions Vacant

SUPERINTENDENT for industrial paint and varnish factory in metropolitan area employing ten in plant; thirty to forty-five; permanent position; output 75 percent war work; we have excellent laboratory and do not need a chemist or formulator, but a man who can coordinate the work and get it done efficiently; state salary desired and details. BOX 415, Oil, Paint and Drug Reporter.

BUSY NEW YORK executive requires assistant, male or female, with trading experience. Write fully. Confidential. BOX 436, Oil, Paint and Drug Reporter.

EXPERIENCED ANALYTICAL Chemist wanted—Acquainted with the pharmaceutical industry. Would prefer one with experience in the manufacturing of ampules. Ziegler Pharmacal Co., Buffalo, N. Y.

Positions Vacant

VARNISH MAKER and helper for peace time industry now working on war orders and situated in North Central States. State age, qualifications, experience, salary, present employer, etc. All replies are confidential. BOX 432, Oil, Paint and Drug Reporter.

WELL-KNOWN CHEMICAL house wants trader to take charge jobbing department. One familiar with imports and exports preferred, but not absolutely essential. Answers treated strictest confidence. BOX 437, Oil, Paint and Drug Reporter.

PRINTING INK color matcher. Must have experience in printing ink manufacturing, steady position with future. BOX 438, Oil, Paint and Drug Reporter.

Positions Wanted

ALL-ROUND CHEMIST — Seventeen years in the industry, trained in organic and inorganic chemistry, knows how to find new products and processes. Desires responsible position with company considering expansion, after the war planning, or chemical intelligence work. BOX 429, Oil, Paint and Drug Reporter.

INDUSTRIAL CHEMIST — Skilled in market research and use development, cost studies and surveys wishes to change position. Has thorough understanding of chemical industry—organic and inorganic—heavy chemicals and fine. Experience fully supplemented by well rounded knowledge of equipment, equipment problems, and industrial personnel. BOX 430, Oil, Paint and Drug Reporter.

—Continued on page 78

SPECIALS!

SHRIVER 12" Wood Plate & Frame, **SHRIVER** 18" C. I., **SPERRY & SHRIVER** 24" C. I. Filter Presses, open and closed delivery.

PFAUDLER Glass Lined Jacketed & Agitated Kettle, 2,100 gals., open top.

2—**BETHLEHEM** Cast Iron Jacketed Kettles, 1,500 gals.

SHARPLES No. 6 Super Centrifuge, **Monel Bowl**, M.D.

BUFFALO Rotary Vacuum Dryers, 5'x20'.

Jar & Pebble Mills, from 1 to 6 gals.

Used Machinery of all Types Wanted. We Pay Highest Prices Commensurate With O.P.A. Ceilings.

Machinery & Equipment Corporation

59 East 4th Street New York City

EQUIPMENT WANTED!

Used equipment of all types and size. Will PAY CASH and remove immediately. Single machines or entire plants. Write or wire collect, giving full description and lowest cash price.

UNION STANDARD EQUIPMENT CO.

318-322 Lafayette Street
New York, N. Y.

STAINLESS STEEL TRUCK TANK

5' dia. x 14', insulated and covered with aluminum, 1,980 gals.

BOILER — KEELER WATER TUBE

200 H.P. 200 lbs. W.P., ASME, with stoker. Used one year.

STAINLESS STEEL TANKS

New, open top, dished bottom, 1" outlet, mounted on stands, 100 gals. each.

STEAM JACKETED KETTLE

3' dia. x 5' deep, with heavy duty agitator, 100 lbs. W.P. (this is a new kettle).

H. LOEB & SON

4603 LANCASTER AVE. PHILADELPHIA, PA.

ARE YOU HAVING TROUBLE?

Locating

A CRITICAL PIECE OF USED MACHINERY OR EQUIPMENT FOR YOUR PLANT

If so

TRY US, WE WILL WELCOME YOUR INQUIRIES — BOTH BUYING and SELLING

TANKS—KETTLES—CHEMICAL PROCESSING EQUIPMENT, Etc.

EMSCO EQUIPMENT COMPANY

EMIL A. SCHROTH, Owner

41 HYATT AVENUE NEWARK, N. J.

Telephone: Mitchell 2-3536

ABSOLUTE AUCTION SALE

OIL REFINING PLANT

formerly

Amalgamated Oil Refining Co.

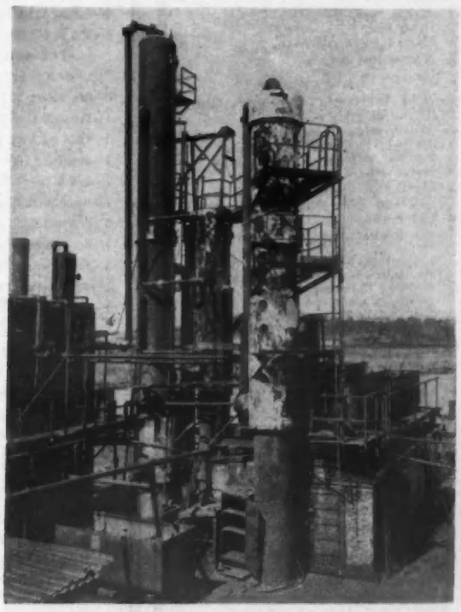
9011 TONNELE AVE., (U.S. Route No. 1) NORTH BERGEN, N.J.

Monday, May 24th, 1943 at 11 a. m.

TANKS 2 Vertical-16' x 25' • 10 Rect. Tanks-6' x 6' up to 20' • 12 Tanks - 5' x 14' • 6 Tanks - 5½' x 12' • 15 Tanks up to 27 feet 6 Tanks - 6' x 18' • Square Tanks

Filter Press 24 x 24 • Air Compressors • Motors • Beams, Valves, Piping and other numerous items • 25-Steam Driven and Rotary Pumps • 2-DeLaval Oil Separators • 1-Fractionating Column-48 inch • 1-Rectifying Tower 48 inch-plates • 1-Packed Tower 54 inches • Large Digester • 125 H.P. Horizontal Boiler built by Hedges, Walsh & Weidner Co. N. J. Standard No. 10, return tubular, oil burning, A.S.M.E. 1288 square feet of heating • 40 K.W. Ames Generating Sets, steam driven, side crank

OFFICE FURNITURE Desks, Typewriter, Typewriter Desk, Chairs. Filing Cabinets, Scales and Stencil Cutter



DIRECTION TO PLANT

Hudson Tunnel from N.Y. to Tonnele Avenue (U. S. Route 1) Jersey City, turn right two miles to plant.

Will be sold Monday, May 24th, 1943 at 11 a. m. in single lots

ADOLPH FRIEDMAN, *Auctioneer*

278 Halsey Street, Newark, N. J. Phone MArket 2-6777

Business Wants

—Continued from page 77

Positions Wanted

UNUSUAL OPPORTUNITY: — Graduate chemist-engineer. Young, with occupational deferment. Brilliant record. Well known in commercial chemical field. Twelve years' broad experience and recognized achievements in industrial coatings, waxes, emulsions, synthetics, chemical specialties, cosmetics, pharmaceuticals, war products. Available; production, research, control, analyses, evenings, Saturday. Only interested reputable company able to capitalize applicants unusual ability, extensive business connections. Duration only. Metropolitan area. BOX 439, Oil, Paint and Drug Reporter.

PHARMACIST, 40, dependents, wishes connection in any capacity with opportunity, wholesale drug, manufacturing, pharmaceutical, chemical or kindred line. Metropolitan area, active, capable, responsible, willing, well experienced including wholesale drugs, $35. BOX 440, Oil, Paint and Drug Reporter.

'Domestic Commerce,' a publication by the Department of Commerce, is now being published monthly rather than weekly.

SPECIALS!

DRYERS—KILNS—FURNACES

1—Vulcan 6'x42' Rotary Dryer, ½" shell.
1—5'x6' Buflovak Atmospheric Drum Dryer.
1—Buflovak Vacuum shelf Dryer, with 11-42"x42" shelves.
1—7'6"x75' Christie Dryer.
1—Atmospheric Double Drum, 1'x9'.
3—Devine Stokes 30"x11', 3'x15', 4'x30' Rotary Vacuum.
7—Rotary, 3'x30', 4'x30', 5'x35', 6'x65'.
1—Rotary Indirect, 6'x45', monel lined.
2—Scott Cookers, jacketed, 3'x5'x8', good for vacuum.
4—Herreshoff, U. S. Furnaces.
4—Rotary Kilns, 6'x50', 8'x125'.

KETTLES—PANS—EVAPORATORS

2—Buffalo 6' dia. Atmospheric Crystallizers.
1—Pfaudler 4'x8', Jacketed, Glass Lined.
1—Badger 1,000 gal. Copper Still.
1—Buflovak Impregnating Kettle, 42"x60".
5—Copper Vacuum Pans, 2'6" to 7' dias.
25—Copper Jckt'd. Kettles, 10 to 300 gals.
8—Steel Jckt'd. Kettles, 50 to 2,000 gal.
1—Devine 60"x48" Closed Jacketed Kettle.
3—Single and Multiple Effect Evaporators, Swenson and Buflovak.

CENTRIFUGALS

1—American Tool 40" Rubber Lined Basket, motor driven with 15 HP AC motor.
1—Weston 40" Suspended, 40 HP AC motor.
3—Tolhurst 40" Suspended 15 HP AC motors.
8—Tolhurst 32", 40", 48", 60", self-balancing type.
6—Sharples No. 4 Centrifuges.
4—DeLaval Nos. 205, 206, 600.

MIXERS

1—W. & P. 50 gal. Mixer, sigma blades.
1—Ross 75 gal. Double Arm Mixer.
2—Day, Robinson Powder Mixers, Jacketed, 500 and 600 lbs.
1—Day No. 30 Imperial, Jckt'd., 75 gal.
10—Trough Mixers, Lab. to 75 gal.
5—Change Can, 2½ to 80 gal.
4—Lead and Paste Mixers, 50 to 100 gal.
1—Day Universal, Jckt'd., 265 gal.
7—Day Powder Mixers, 25 to 2,000 lbs.

FILTERS

1—No. 5 Sweetland Filter, with 30 copper leaves on 2" centers.
1—Sperry 36"x36", cast iron, 48 chambers.
1—United 36"x36", cast iron, 41 chambers.
5—Shriver Skeletons, 30" to 36" square.
5—Kilby 30"x30", cast iron, 38 chambers.
8—Oliver Rotary 4'x6' to 12'x20'.
2—Sweetland Filters, Nos. 7, 10.

PULVERIZERS—GRINDERS

4—200 gal. Pebble Mills, 4½'x3½'.
8—Rubber Lined Pebble Mills, 24"x36", 36"x36", 75 to 100 gal.
15—Pebble Mills, Lab. to 200 gal.
6—Day, Ross Roller Mills, 9"x24", 12"x30", 16"x16".
5—Raymond Roller Mills, 3, 4, 5 rolls.
3—Raymond Pulverizers, Nos. 0000, 00, 3.
5—Hardinge Ball Mill's, 3' to 8' dias.
5—Colloid Mills, ½ to 100 HP.
15—Hammer Mills, Williams, Jaybee, etc.

TANKS

1—350 gal. Rubber Lined.
3—Lead Lined, 1,700 gal., Vacuum.
1—Lead Lined, 1,700 gal., with agitator.
2—20'x20', open top, Steel.
16—Glass Lined, 50 to 1,500 gal.
19—Steel, 3,500 to 20,000 gal.

MISCELLANEOUS

5—Rotex, Tyler Screens.
6—Vapor Heaters, 100 to 500 sq. ft.
2—Glens Falls Sulphur Burners.
40—Pumps, Centrifugal, Rotary, 1" to 6".
10—Vacuum Pumps, Devine, Buffalo, Nash.
3—Pumps, Lead, Alum., 1½" to 3".
Lead Pipe & Valves, 2" to 6".
Screw Conveyors, Bucket Elevators, Belt Conveyors, etc.

YOUR INQUIRIES SOLICITED
SEND US YOUR LISTINGS

BRILL Equipment Co.
183 VARICK STREET NEW YORK

Ostrom in Navy

John Ostrom has been granted a leave of absence as secretary of the Drug, Chemical and Allied Trades Section of the New York Board of Trade to serve as lieutenant (junior grade) in the U. S. Navy. Mr. Ostrom, who is a graduate of Yale, studied Naval Science there, and formerly held a reserve commission as an ensign.

—O-P-D—

R. T. Hackett has been appointed sales manager of the Richmond, Va., district of Rumford Baking Powder Company.

EQUIPMENT
for the
Oil, Paint and Drug Industries

10—Sharples Super Pressurite Centrifuges
2—DeLaval No. 600 Clarifiers, belt and motor driven
1—Kent Water-Cooled 3-Roll Mill, 12 x 30"
1—Ross Water-Cooled 3-Roll Mill, 16 x 40"
1—National Water-Cooled 5-Roll Mill, 20 x 40," 16 x 40"
1—Change Can Mixer, 8-gals., Motor Driven
1—W. & P. Laboratory 2-qt. Mixer, Motor Driven
200—Steel Storage Tanks, 100-gals., 15,000-gals

ALSO: Heat Exchangers, Condensers, Jacketed Kettles, Filter Presses, Evaporators, Extractors, Pumps, etc.

Send for "Gelb News Record"

R. GELB & SONS, INC.
UNION, NEW JERSEY
UNionville 2-4900
Established 1886

SPECIAL

1—3 ROLL HIGH SIDE RAYMOND MILL, BELT DRIVEN, COMPLETE WITH CONE SEPARATOR, FAN, CYCLONE DUST COLLECTOR AND PIPING.

1—Procter Autom. Conveyor Dryer.
2—Buckeye 15 Box Hydraulic Oil Presses, 16" Ram, 24" Stroke, 4000 lbs. P.S.I.
4—Watson-Stillman & Robertson Hydr. Pumps.
1—Badger 42" Monel Alcohol Column.
1—W.& P. 150 gal. Jack. Mixer, Size 16.
1—Faust 150 gal. Jack. Double Spray Mixer.
2—5 Roll W.C. 16" x 40" Steel Roller Mills.
6—Dry Mixers, 50 to 1000 lbs.
4—Stainless Steel Filter Press Plates, 24"x24".
3—4,000 gal. Vert. Acid Proof Tanks.
1—Sweetland Filters, No. 5.
1—Ball & Jewell No. 1½ Rotary Cutter.
1—No. 4 Mikro Pulverizer.
8—Iron and Wood Filter Presses, 18" to 30".
1—No. 2 Oliver Duplex Vac. Pump, 14" x 8".
1—Pennsylvania Vac. Pump, 14" x 5".
2—Worthington 12" x 12" x 12" Vac. Pumps.
1—De Laval No. 301 Multiple Clarifier, M.D.
5—Ross 2½, 15 and 40 gal. Pony Mixers.
4—Ross 3 Roll Mills, 12" x 30" and 16" x 40".
10—Pebble and Jar Mills, Lab. to 500 gals.
2—Tolhurst Centrifugals, 32" and 40".
8—Stone Mills, 10" to 32".
8—Lead and Paste Mixers, 50 to 135 gals.
6—Hortz. and Vert. Mixers, up to 500 gals.
10—Glass Lined & Steel Tanks up to 4,000 gals.
6—Vert. Jack. Kettles, up to 500 gals.
8—Copper Jack. Kettles, up to 150 gals.
1—Schutz-O'Neill No. 1 Sugar Pulverizer.
1—Jeffrey 24" x 18" Type A Hammer Mill.
3—Single and Double Roll Spike Crushers.
2—No. 0 and No. 1 Raymond Mills.
3—Williams Hammer Mills.
10—Electric Agitators, ½ to 3 H.P.
20—Rotary, Centrifugal and Triplex Pumps.
6—Liquid, Paste and Powder Fillers.

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Baddeleyite

(Brazilite, Native Zirconium Dioxide)

Chemical
Source of—
Zirconium oxide used for various purposes in industry
Source of—
Zirconium in making zirconium chemicals

Metallurgical
Source of—
Zirconium metal
Starting point in making—
Ferrozirconium
Zirconium alloys

Refractory
As a refractory

Butyl-Mercury Phosphate

Rubber
Preservative (Brit. 499578) for—
Latex

Calcium Carbonate, Precipitated

(Continued from April 26 issue)

Food
Preventer of—
Caking of table salt
Neutralizing agent for—
Acidity in making yeast

Insecticide and Fungicide
Carrier and spreader n—
Fungicides Insecticides

Glass
Raw material in making—
Fine glass

Leather
Filler and pigment in—
Leather finishing

Linoleum and Oilcloth
Filler and pigment in—
Linoleum Oilcloth

Miscellaneous
Filler in—
Crayons
Pencils
Rope and twine sizes
Window shade cloth
Mild abrasive in—
Cleansing compositions
Polishing compositions
Pigment in—
Pipeclay compositions
Polishing compositions
Polishing agent in—
Various compositions

Paint, Varnish, and Lacquer
Base for—
Color lakes
Extender, filler, and pigment in—
Enamels Paints
Lacquers

Paper
Filler and pigment in—
Coating compositions
Paper Wallpaper
Loading agent for—
Paper

Pharmaceutical
In compounding and dispensing practice
Suggested for use as—
Antacid
Alkalizer
Digestion promoter
Filtering medium
Suggested as coating agent for—
Lozenges Tablets
Pills Troches

Plastics
Filler or pigment in—
Plastics

Printing
Process material in—
Lithographic processes
Process engraving

Rubber
Filler in—
Rubber batches
Increaser of—
Tear resistance
Pigment in—
Rubber batches

Soap
Abrasive, absorbent and filler in—
Grease removing compositions

Textile
Filler in—
Dressing compositions
Finishing compositions
Textile fabrics

Dimethylisopropyl Carbinol

Chemical
New organic chemical available for experimental use

Emery

(An impure variety of the mineral corundum, containing 30 percent to 40 percent magnetite and small, variable amounts of other minerals; its color may be a dull-black, a dark-gray, or even bluish-black; specific gravity, 3.75 to 4.31; it is found in the United States of America, Greece, and Asia Minor)

Abrasives
Abrasive used in form of—
Belts Powders
Disks Wheels
Emery papers Whetstones
Hones
Abrasive in—
Wood pulp grinder (U.S. 1518422)
Ingredient of—
Cleaning compounds for various purposes
Polishing agents for various purposes

Building Construction
Antislip agent in—
Floorings of artificial stone, concrete, terrazzo, tile, and other compositions
Ingredient of—
Lutes

Jewelry
Process material (U.S. 1394442 and 1448010) in making—
Artificial spinel (a gemstone)

Miscellaneous
Process material (U.S. 1480352) in—
Removing shine from fabrics

Printing
Ingredient (U.S. 1245370) of—
Printing matrix
Process material (U.S. 1441283) in making—
Halftone cut overlays

Refractory
Raw material in making—
Refractories

Tetramethylthiuram Bisulphide

(Additional uses—supplementary to information in the book, Uses and Applications of Chemicals and Related Materials—see bottom of this page)

Insecticide and Fungicide
Seed disinfectant claimed to be effective for—
Cowpeas Soybeans
Grasses Vegetables
Peanuts Velvet beans
Seed disinfectant claimed to be effective in combatting—
Damping-off (both pre-emergence and postemergence damping-off by both rhizoctonia and pythium)
Brown patch and dollar-spot on golf turf
Seed decay
Soilborne diseases

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